

SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30				1. REQUISITION NUMBER		PAGE 1 OF 19	
2. CONTRACT NO.		3. AWARD/EFFECTIVE DATE		4. ORDER NUMBER		5. SOLICITATION NUMBER N00164-01-R-0112	
7. FOR SOLICITATION INFORMATION CALL:		a. NAME Paul R. Johnson		b. TELEPHONE NUMBER (No collect calls) (812) 854-3225		6. SOLICITATION ISSUE DATE 23 July 01 LOCAL TIME 2:00 PM 22 Aug 2001	
9. ISSUED BY NAVAL SURFACE WARFARE CENTER 300 HWY 361 BLDG 2521 CODE 1162NP CRANE, IN 47522 PROPOSALS SHALL BE SUBMITTED TO THE ABOVE ADDRESS				10. THIS ACQUISITION IS <input checked="" type="checkbox"/> UNRESTRICTED <input type="checkbox"/> SET ASIDE: % FOR <input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> SMALL DISAV. BUSINESS <input type="checkbox"/> 8(A) SIC: 332992 SIZE STANDARD: 1000		11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED <input type="checkbox"/> SEE SCHEDULE 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700) 13b. RATING 14. METHOD OF SOLICITATION <input type="checkbox"/> RFQ <input type="checkbox"/> IFB <input checked="" type="checkbox"/> RFP	
15. DELIVER TO RECEIVING OFFICER 300 HWY 361, BLDG 2074, ATTN: MR SUNG KIM CRANE, IN 47522				16. ADMINISTERED BY			
17a. CONTRACTOR/ OFFEROR				18a. PAYMENT WILL BE MADE BY			
TELEPHONE NO.				18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM			
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER							
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES			21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
SEE ATTACHED PAGES <i>(Attach Additional Sheets as Necessary)</i>							
25. ACCOUNTING AND APPROPRIATION DATA						26. TOTAL AWARD AMOUNT (For Govt. Use Only)	
<input type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED <input type="checkbox"/> 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR IS ATTACHED. ADDENDA <input type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED							
28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN _____ COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.				29. AWARD OF CONTRACT: REFERENCE _____ OFFER <input type="checkbox"/> DATED _____, YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:			
30a. SIGNATURE OF OFFEROR/CONTRACTOR				31a. UNITED STATES OF AMERICA (SIGNATURE OF CONTRACTING OFFICER)			
30b. NAME AND TITLE OF SIGNER			30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER			31c. DATE SIGNED
32a. QUANTITY IN COLUMN 21 HAS BEEN <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED				33. SHIP NUMBER <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		34. VOUCHER NUMBER	
32b. SIGNATURE OF AUTHORIZED GOVT. REPRESENTATIVE				32c. DATE		35. AMOUNT VERIFIED CORRECT FOR	
41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT				36. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		37. CHECK NUMBER	
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER				41c. DATE		38. S/R ACCOUNT NUMBER	
				42a. RECEIVED BY (Print)		39. S/R VOUCHER NUMBER	
				42b. RECEIVED AT (Location)		40. PAID BY	
				42c. DATE REC'D (YY/MM/DD)		42d. TOTAL CONTAINERS	

AUTHORIZED FOR LOCAL REPRODUCTION

SEE REVERSE FOR OMB CONTROL NUMBER AND PAPERWORK BURDEN STATEMENT

STANDARD FORM 1449 (10-95)
Prescribed by GSA - FAR (48 CFR) 53.212

				Unit Price	Total Price
0001	5.56MM frangible Cartridges In accordance with Specifications MINIMUM QUANTITY	1,052,880	ea	\$	\$
0002	Same as CLIN 0001 MAXIMUM QUANTITY	1,500,000ea		See Below	

Note: The Maximum quantity is an amount in addition to the minimum.

Qty	Unit Price	Unit Price	Unit Price
CLIN 0002	1st Year	2nd Year	3rd Year
200,000 to 500,000	\$	\$	\$
500,001 to 1,500,000	\$	\$	\$

SCHEDULE NOTES:

SPECIAL NOTICE - The Director, Defense Procurement has revised DFARS to require contractors to be registered in the Central Contractor Registration (CCR) as a condition for receipt of contract award effective 1 June 1998. Offerors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at <http://ccr.edi.disa.mil>. For further details regarding the requirements of CCR, offerors are advised to review the requirements of DFAR 252.204-7004 contained herein.

EXPEDITING CONTRACT CLOSEOUT (NAVSEA) (DEC 1995)

(a) As part of the negotiated fixed price or total estimated amount of this contract, both the Government and the Contractor have agreed to waive any entitlement that otherwise might accrue to either party in any residual dollar amount of \$500 or less at the time of final contract closeout. The term "residual dollar amount" shall include all money that would otherwise be owed to either part at the end of the contract except that, amounts connected in any way with taxation, allegations of fraud and/or antitrust violations shall be excluded. For purposes of determining residual dollar amounts, offsets of money owed by one party against money that would otherwise be paid by that party may be considered to the extent permitted by law.

(b) This agreement to waive entitlement to residual dollar amounts has been considered by both parties. It is agreed that the administrative costs for either part associated with collected such small dollar amounts could exceed the amount to be recovered.

List your Commercial and Government (CAGE) Code and Contractor Establishment Code in Block 17a. of Page 1.

The agency authorized to place delivery orders against this contract is: Crane Division, Naval Surface Warfare Center (NAVSURFWARCENDIV Crane), Crane, IN 47522.

Delivery orders will be placed against this contract by the Government using a DD 1155 format.

Delivery orders placed under this contract will be placed by the Government no later than 3 Years from Contract Award date.

Cage Code and DUN's number should be provided when proposal is submitted.

Technical questions regarding this solicitation should be submitted to Contracting Officer, Code 1162NP, Bldg 2521, 300 Hwy 361, Crane, IN 47522 at least 10 days prior to closing date.

It is requested that technical questions concerning this procurement be submitted, via electronic mail not later than 2:00 PM EST on the seventh calendar day preceding the date shown in item 8 on page 1 submitted to the following e-mail address: johnson_p@cran.navy.mil

Note: Amendment(s) to this solicitation will be issued and posted on the Naval Surface Warfare Center Homepage. This note is being issued as notification that each prospective offeror is responsible to access the Homepage/solicitation independently without further notification from this office to inquire for amendment(s). Additionally, Offerors are required to acknowledge the acceptance of amendments issued with submission of their offers.

Naval Surface Warfare Center Homepage; Steps to access Request for Proposals are:

1. Go to Crane Home page: WWW.crane.navy.mil
2. Select "Acquisition/Business Opportunities"
3. Select "Supply, Services, Research & Development Contracting"
4. Select "Business Opportunities"
5. Select "Solicitation"

Click on the solicitation you want to review

Contract Clauses in accordance with FAR subparagraph 12.303(c)

CONTRACT TERMS & CONDITIONS--COMMERCIAL ITEMS (May 1999)
52.212-04

NOTE: The clause at FAR 52.212-4 has been tailored for this procurement as follows:

ADDENDUM to 52.212-4

3) The following paragraph is hereby added to the clause:

(t) *Contractor Performance Reports.* The Government may evaluate the performance of the contractor awarded the contract resulting from this solicitation, in accordance with FAR 42.1500. The following performance rating factors will be utilized:

Quality
Cost Control
Timeliness of Performance
Business Relations
Customer Satisfaction

Required Delivery Schedule

<u>CLIN</u>	<u>QTY</u>	<u>Required Delivery</u>
<u>0001,</u>	<u>As ordered</u>	<u>90 Days after Order</u>
<u>0002,</u>	<u>As Ordered</u>	<u>90 Days after Order</u>

PLACE OF DELIVERY

The material to be furnished hereunder shall be delivered F.o.b. destination with all transportation charges paid by the supplier to

TO BE SPECIFIED IN EACH ORDER

The contractor shall schedule deliveries under this contract to ensure arrival at destination only on Monday through Friday (excluding holidays) between the hours of 7:00 A.M. and 2:00 P.M. Eastern Standard Time. The receiving facility for this material is closed on Saturdays and Sundays.

MAIL INVOICES TO:

NAVSURFWARCENDIV

Receipt Control

Bldg 2700, Code 0562

300 Hwy 361

Crane, IN 47522

Addendum to 52.212-1

Gratuities (Apr 1984)	52.203-3
Defense Priority and Allocation Requirements (Sep 2000)	52.211-15
Hazardous Material Identification and Material Safety Data (Jan 97)	52.223-3
Stop Work Order (Aug 1989)	52.242-15
Changes - Fixed Price (Aug 1987)	52.243-1
Required Central Contractor Registration (Mar 2000)	252.204-7004
Safety Precautions for Ammunition and Explosives (5/94)	252.223-7002
Change in Place of Performance- Ammunition and Explosives (12/91)	252.223-7003

FULL TEXT**NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (FAR 52.211-14) (SEP 1990)**

Any contract awarded as a result of this solicitation will be () DX rated order; (X) DO rated order certified for national defense use under the Defense Priorities and Allocations System (DPAS) (15 CFR 700), and the Contractor will be required to follow all of the requirements of this regulation.

ORDERING (OCT 1995) (FAR 52.216-18)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from Contract Award through 3 Years from Contract Award.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

ORDER LIMITATIONS (OCT 1995) (FAR 52.216-19)

(a) Minimum Order. When the Government requires supplies or services covered by this contract in an amount of less

than 200,000, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum Order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of 1,053,000

(2) Any order for a combination of items in excess of 1,053,000 ;

or

(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) of this section.

(c) If this is a requirement contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 14 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for the reasons. Upon receiving this notice, the Government may acquire the supplies or service from another source.

INDEFINITE QUANTITY (OCT 1995) (FAR 52.216-22)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum". The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 3 years from effective date of contract.

STANDARD COMMERCIAL WARRANTY (NAVSURFWARCENDIV)

The contractor shall extend to the Government the full coverage of any standard commercial warranty normally offered in a similar commercial sale, provided such warranty is available at no additional cost to the Government. Acceptance of the standard commercial warranty does not waive the Government's rights under the "Inspection" clause nor does it limit the Government's rights with regard to the other terms and conditions of this contract. In the event of a conflict, the terms and conditions of the contract shall take precedence over the standard commercial warranty. The standard commercial warranty period shall begin upon final acceptance of the applicable material and/or services listed in the Schedule.

The contractor shall provide a copy of its standard commercial warranty (if applicable) with its offer. The warranty covers a period of

 months. (Offeror is to insert number.)

CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS -- COMMERCIAL ITEMS (FEB 2001) (FAR 52.212-5)

(a) The Contractor shall comply with the following FAR clauses, which are incorporated in this contract by reference, to implement provisions of law or executive orders applicable to acquisitions of commercial items:

- (1) 52.222-3, Convict Labor (E.O. 11755);
- (2) 52.233-3, Protest after Award (31 U.S.C 3553).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the contracting officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items or components:

[Contracting Officer shall check as appropriate.]

 X (1) 52.203-6, Restrictions on Subcontractor Sales to the Government, with Alternate I (41 U.S.C. 253g and 10 U.S.C. 2402).

 (2) 52.219-3, Notice of HUBZone Small Business Set-Aside (Jan 1999).

 X (3) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (Jan 1999) (if the offeror elects to waive the preference, it shall so indicate in its offer).

 (4) (i) 52.219-5, Very Small Business Set-Aside (Pub. L. 103-403, section 304, Small Business Reauthorization and Amendments Act of 1994).

 (ii) Alternate I to 52.219-5.

 (iii) Alternate II to 52.219-5.

 X (5) 52.219-8, Utilization of Small Business Concerns (15 U.S.C. 637 (d)(2) and (3)).

 X (6) 52.219-9, Small Business Subcontracting Plan (15 U.S.C. 637 (d)(4)).

 (7) 52.219-14, Limitations on Subcontracting (15 U.S.C. 637(a)(14)).

 (8) (i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

 (ii) Alternate I of 52.219-23.

 (9) 52.219-25, Small Disadvantaged Business Participation Program-Disadvantaged Status and Reporting (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

- ___ (10) 52.219-26, Small Disadvantaged Business Participation Program-Incentive Subcontracting (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).
- X (11) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).
- X (12) 52.222-26, Equal Opportunity (E.O. 11246).
- X (13) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212).
- X (14) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793).
- X (15) 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212).
- X (16) 52.222-19, Child Labor-Cooperation with Authorities and Remedies (E.O. 13126).
- ___ (17)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (42 U.S.C. 6962(c)(3)(A)(ii)).
- ___ (ii) Alternate I of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).
- ___ (18) 52.225-1, Buy American Act-Balance of Payments Program-Supplies (41 U.S.C. 10a-10d).
- ___ (19)(i) 52.225-3, Buy American Act - North American Free Trade Agreement - Israeli Trade Act - Balance of Payments Program (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note).
- ___ (ii) Alternate I of 52.225-3.
- ___ (iii) Alternate II of 52.225-3.
- ___ (20) 52.225-5, Trade Agreements (19 U.S.C. 2501, *et seq.*, 19 U.S.C. 3301 note).
- X (21) 52.225-13, Restriction on Certain Foreign Purchases (E.O. 12722, 12724, 13059, 13067, 13121, and 13129).
- ___ (22) 52.225-15, Sanctioned European Union Country End Products (E.O. 12849).
- ___ (23) 52.225-16, Sanctioned European Union Country Services (E.O. 12849).
- X (24) 52.232-33, Payment by Electronic Funds Transfer-Central Contractor Registration (31 U.S.C. 3332).
- ___ (25) 52.232-34, Payment by Electronic Funds Transfer-Other Than Central Contractor Registration (31 U.S.C. 3332).
- ___ (26) 52.232-36, Payment by Third Party (31 U.S.C. 3332).
- ___ (27) 52.239-1, Privacy or Security Safeguards (5 U.S.C. 552a).
- X (28) (i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (46 U.S.C. 1241).
- ___ (ii) Alternate I of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, which the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or executive orders applicable to acquisitions of commercial items or components:

[Contracting Officer check as appropriate.]

- ___ (1) 52.222-41, Service Contract Act of 1965, As Amended (41 U.S.C. 351, *et seq.*).
- [Subcontracts for certain commercial services may be exempt from coverage if they meet the criteria in FAR 22.1103-4(c) or (d) (see DoD class deviation number 2000-O0006)]**
- ___ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (29 U.S.C. 206 and 41 U.S.C. 351, *et seq.*).
- ___ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act -- Price Adjustment (Multiple Year and Option Contracts) (29 U.S.C.206 and 41 U.S.C. 351, *et seq.*).
- ___ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act -- Price Adjustment (29 U.S.C. 206 and 41 U.S.C. 351, *et seq.*).
- ___ (5) 52.222-47, SCA Minimum Wages and Fringe Benefits Applicable to Successor Contract Pursuant to Predecessor Contractor Collective Bargaining Agreement (CBA) (41 U.S.C. 351, *et seq.*).
- ___ (6) 52.222-50, Nondisplacement of Qualified Workers (Executive Order 12933).

(d) *Comptroller General Examination of Record.* The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records -- Negotiation.

- (1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.
- (2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.
- (3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.
- (e) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c) or (d) of this clause, the Contractor is not required to include any FAR clause, other than those listed below (and as may be required by an addenda to this paragraph to establish the reasonableness of prices under Part 15), in a subcontract for commercial items or commercial components --
- (1) 52.222-26, Equal Opportunity (E.O. 11246);
 - (2) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (38 U.S.C. 4212);
 - (3) 52.222-36, Affirmative Action for Workers with Disabilities (29 U.S.C. 793);
 - (4) 52.247-64, Preference for Privately-Owned U.S. Flag Commercial Vessels (46 U.S.C. 1241) (flow down not required for subcontracts awarded beginning May 1, 1996); and
 - (5) 52.222-41, Service Contract Act of 1965, As Amended (41 U.S.C. 351, *et seq.*).
- (End of Clause)

CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO DEFENSE ACQUISITIONS OF COMMERCIAL ITEMS (DEC 2000) (DFARS 252.212-7001)

- (a) The Contractor agrees to comply with any clause that is checked on the following list of DFARS clauses which, if checked, is included in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items or components.
- | | |
|--|--|
| <input checked="" type="checkbox"/> 252.205-7000 | Provision of Information to Cooperative Agreement Holders (10 U.S.C. 2416). |
| <input type="checkbox"/> 252.206-7000 | Domestic Source Restriction (10 U.S.C. 2304). |
| <input checked="" type="checkbox"/> 252.219-7003 | Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (DoD Contracts) (15 U.S.C. 637). |
| <input checked="" type="checkbox"/> 252.225-7001 | Buy American Act and Balance of Payments Program (41 U.S.C. 10a-10d, E.O. 10582). |
| <input type="checkbox"/> 252.225-7007 | Buy American Act--Trade Agreements--Balance of Payments Program (41 U.S.C. 10a-10d, 19 U.S.C. 2501-2518, and 19 U.S.C. 3301 note). |
| <input checked="" type="checkbox"/> 252.225-7012 | Preference for Certain Domestic Commodities. |
| <input checked="" type="checkbox"/> 252.225-7014 | Preference for Domestic Specialty Metals (10 U.S.C. 2241 note). |
| <input type="checkbox"/> 252.225-7015 | Preference for Domestic Hand or Measuring Tools (10 U.S.C. 2241 note). |
| <input type="checkbox"/> 252.225-7016 | Restriction on Acquisition of Ball and Roller Bearings
(___ Alternate I) (Section 8064 of Pub. L. 106-259). |
| <input type="checkbox"/> 252.225-7021 | Trade Agreements (19 U.S.C. 2501-2518 and 19 U.S.C. 3301 note). |
| <input type="checkbox"/> 252.225-7027 | Restriction on Contingent Fees for Foreign Military Sales (22 U.S.C. 2779). |
| <input type="checkbox"/> 252.225-7028 | Exclusionary Policies and Practices of Foreign Governments (22 U.S.C. 2755). |
| <input type="checkbox"/> 252.225-7029 | Preference for United States or Canadian Air Circuit Breakers (10 U.S.C. 2534(a)(3)). |
| <input type="checkbox"/> 252.225-7036 | Buy American Act--North American Free Trade Agreement Implementation Act--Balance of Payments Program (___ Alternate I) (41 U.S.C. 10a-10d and 19 U.S.C. 3301 note). |
| <input checked="" type="checkbox"/> 252.227-7015 | Technical Data--Commercial Items (10 U.S.C. 2320). |
| <input checked="" type="checkbox"/> 252.227-7037 | Validation of Restrictive Markings on Technical Data (10 U.S.C. 2321). |
| <input checked="" type="checkbox"/> 252.243-7002 | Requests for Equitable Adjustment (10 U.S.C. 2410). |
| <input type="checkbox"/> 252.247-7023 | Transportation of Supplies by Sea (___Alternate I) (___Alternate II) (10 U.S.C. 2631). |
| <input type="checkbox"/> 252.247-7024 | Notification of Transportation of Supplies by Sea (10 U.S.C. 2631). |

(b) In addition to the clauses listed in paragraph (e) of the Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items clause of this contract (Federal Acquisition Regulation 52.212-5), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014	Preference for Domestic Specialty Metals, Alternate I (10 U.S.C. 2241 note).
252.247-7023	Transportation of Supplies by Sea (10 U.S.C. 2631).
252.247-7024	Notification of Transportation of Supplies by Sea (10 U.S.C. 2631).
	(End of clause)

Exhibits/Attachments section in accordance w/ FAR 12.303(d)

HYBRID SPECIFICATION, CARTRIDGE, CALYBER 5.56MM, SEMI-JACKETED FRANGIBLE

PACKAGING DRAWINGS 7520765, 7520764, 11010481, 11010483, 11010484, 7553347, 7553296, 11744234, 8594163, 8794342, 9325874

Contract Data Requirements List Items

A001 Test and Inspection Report
A002 Ammunition Data Cards
A003 Test and Inspection Plan

Provisions section in accordance with FAR 12.303(e)

Instructions to Offerors -- Commercial Items (Oct 2000)
52.212-1

NOTE: The provision at 52.212-1 has been tailored as listed above.
A single award will be made under this announcement

EVALUATION SECTION

ALTERNATE PROPOSALS

Offerors may submit more than one proposal, each of which must satisfy the mandatory requirements of the solicitation, including any Benchmark Tests, in order to be considered. As a minimum, one of the proposals submitted must be complete. The alternate proposal(s) may be in an abbreviated form following the same section format, but providing only those sections which differ in any way from those contained in the original proposal. Each proposal will include cost tables indicating the complete range of pricing options. In the case of price/cost options for a given configuration, an alternate proposal will not be required. If alternate proposals are submitted, such alternatives will be clearly labeled and identified on the cover page of each separate document. The reason for each alternate and its comparative benefits shall be explained. Each proposal submitted will be evaluated on its own merits.

Product Sample and Technical Proposal

a. A quantity of 2,000 complete cartridges is required as product samples for the item indicated in this solicitation and must be furnished as part of the offer. The samples must be received on or before the time set forth for receipt of offers and are considered to be part of the offerors proposal. The samples are to be delivered to the following address:

Receiving Officer
Naval Surface Warfare Center, Crane Division
Bldg. 2075
Attn: (Sung Kim, Code 4083)
300 Highway 361
Crane, IN 47522-5001

b. Product samples will be tested or evaluated to determine compliance with the requirements outlined in paragraphs 3.4.1, 3.4.2, 3.4.3 (M4A1 requirements only), 3.4.4, 3.4.5 and 3.4.6 of Hybrid Specifications, HS/4083/C01/1240.

c. Product samples provided shall meet the following requirements in Hybrid Specifications, HS/4083/C01/1240:

- (a) Paragraph 3.2 requirements
- (b) Paragraph 3.3 requirements.

The contractor shall submit documentation, along with the product samples, that substantiates the product samples meet the above requirements. The below table contains the documentation that shall be submitted with the product samples. The Government may not evaluate product samples if the documentation listed in the below table is not submitted.

Paragraph No.	Required Documentation
3.2.1.1	1. Projectile drawing including dimensions 2. Projectile Material Safety Data Sheet
3.2.2	1. Cartridge case drawing including dimensions 2. Sample product certifications for cartridges case in accordance with ASTM Method B 19-95, Standard Specification for Cartridge Brass Sheet, Strip, Plate, Bar and Disks (Blanks) 3. Cartridge case Material Safety Data Sheet
3.2.3	1. Propellant Material Safety Data Sheet
3.2.4	1. Primer Material Safety Data Sheet
3.3.1	1. Actual dimensional inspection data of primer seating depth
3.3.2	1. Complete cartridge drawing including dimensions
3.3.3	1. Actual test data of 10 cartridges

d. If the product samples do not comply with the above requirements, the samples will be technically unacceptable. Any such contractor will receive no further consideration for award.

e. All product samples which are not destroyed in testing will not be returned to the contractor.

f. Product samples provided do not count toward deliverable quantities specified in the Schedule of Supplies specified.

g. Product samples provided can be packed in commercial package.

h. Product sample provided can have a commercial headstamp marking.

SUBCONTRACT DATA REQUIRED

It is the intent of the Government to encourage the use of Small Business, Small and Disadvantaged Businesses and Woman Owned Businesses whenever practicable. Describe the extent to which your company has identified and committed to provide for participation by small, small and disadvantaged businesses (SDB), woman owned businesses (WOB), historically black colleges and universities, or other minority institutions for the performance of this effort. The Offeror shall provide sufficient information to demonstrate that the tasks assigned the selected small and/or SDB and WOB subcontractors are meaningful in the sense that they will be performing functions important to the overall success of the program and also broaden the subcontractor's technical capability. The offeror shall describe their management approach for enhancing small, SDB and WOB subcontractor's technical capability. Of special interest is the amount and type of work to be performed by the subcontractors. The offeror shall explain the reasons for and advantages of selecting particular subcontractors. Performance shall be separate from subcontracting plans to be submitted by large businesses pursuant to FAR 52.219-9, but must incorporate the goals stressed herein.

EVALUATION--COMMERCIAL ITEMS (JAN 1999) (FAR 52.212-2)

(a) The Government will award a contract resulting from this solicitation to the responsible offeror whose offer best conforms to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

Evaluation Criteria:

Technical

Written Technical Documentation

Product Samples

Past Performance

Price

Subcontracting Criteria

****Note:** Any offeror whose supplies have not been previously approved and certified for Department of the Navy use will have a cost of \$83,483.00 applied to their offered price. This is to cover the additional testing and approval costs required by the government to have noncertified ammunition approved for Navy usage. This is shown below in the price evaluation example scheme.

The Technical subfactors are equal in importance and are more important than the Past Performance.

Past Performance is more important than Price.

Price is significantly more important than the Subcontracting Criteria factor.

Rating System

Evaluations shall be conducted using an adjectival rating system for all factors except price.

Technical, Past performance, and Subcontracting Criteria will be assessed by the SSA/Contracting Officer and assigned a narrative rating in the evaluation. Each offeror will be given an adjectival rating of: highly favorable, favorable, unfavorable, or highly unfavorable. Offerors who do not have same or similar past performance information reasonably available to the Contracting Officer will be rated neither favorably nor unfavorably.

Accordingly each offer is required to submit the data and bid samples defined elsewhere in this solicitation.

The Government will also assess the offeror's past performance in the evaluation for contract award. Accordingly, each offeror is required to submit a list of its five most recent contracts for the same or similar items. It is preferred that these contracts be with U.S. government customers, but contracts with other commercial concerns are also acceptable. Offerors are authorized to provide information relative to any problems encountered on the identified contracts and any corrective actions taken by the offeror. The Source Selection Authority (SSA)/Contracting Officer will evaluate the offeror's past performance; based upon the information furnished by the offeror, or other information obtained by the Contracting Officer. The Contracting Officer is not responsible for locating or securing any information not identified in the offer. The SSA/Contracting Officer may, however, utilize all available information, including information not provided by the offeror, in the past performance evaluation.

Offerors without corporate past performance history are encouraged to submit past performance information, or key personnel data, previous subcontracting experience, etc. for the Government to evaluate.

(b) Although price is not a weighted evaluation factor, it will not be ignored. The degree of importance of the price will increase with the degree of equality of the proposals in relation to the other factors on which selection is to be based, or when the cost is so significantly high as to diminish the value of the technical superiority to the Government.

(c) A written notice of award or acceptance of an offer, mailed or otherwise furnished to the successful offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award.

In the event there are substantial differences among the offerors in terms of past performance, the Government reserves the right to award to other than the lowest priced offer in favor of an offeror with substantially better performance history. In addition, the Government may accept other than the lowest priced offer if doing so would result in greater value to the Government in terms of technical performance, quality, reliability, life cycle cost, or

lower overall program risk. As a part of the Subcontracting criteria evaluation, the Government will assess the offeror's previous compliance with the requirements of FAR 52.219-8 and 52.219-9 as applicable

PRICE EVALUATION

Price evaluation for all CLINS will be conducted as shown in the below example.

CLIN 0002	1st Year	2nd Year	3rd Year
200,000 to 500,000	\$.50	\$.51	\$.52
500,001 to 1,500,000	\$.50	\$.51	\$.52
Average Price	\$.50	\$.51	\$.52

CLIN 0001

1,052,880 ea X .50= \$526,440.00

CLIN 0002

500,000 X .50=\$	250,000.00
500,000 X .51=\$	255,000.00
500,000 X .52=\$	260,000.00
Total	\$ 765,000.00

Total Evaluated Price

0001	\$ 526,440.00
0002	\$ 765,000.00
SubTotal	\$1,291,440.00
Evaluation assessment (non-certified items)	83,483.00
TOTAL	\$1,374,923.00

The Government may award a contract on the basis of initial offers received, without discussions. Therefore, each initial offer should contain the offeror's best terms from a cost or price and technical standpoint. However, if considered necessary by the contracting officer, discussions will be conducted with only those offerors determined to have a reasonable chance for award.

The Government reserves the right to make an award to other than the lowest priced offeror or to the offeror with the highest technical rating if the Contracting Officer determines that to do so would result in the greatest value to the Government.

CONTRACTOR PERFORMANCE DATA (OCT 1995)

The offeror shall demonstrate past performance through completion of the "Contractor Performance Data Sheet". The Contractor Performance Data Sheet shall be completed in its entirety. Data other than that requested on the Contractor Performance Data Sheet will not be considered. Additionally, offerors are urged to submit brief and concise responses, within the confines of the space allotted. *Failure to submit the completed Contractor Performance Data Sheet (along with the proposal) shall be considered certification (by signature on the proposal) that the contractor has no past performance for like or similar items for the Government to evaluate.*

CONTRACTOR PERFORMANCE DATA SHEET

NOTE: THE INFORMATION PROVIDED MAY BE USED TO EVALUATE THE OFFEROR'S PAST PERFORMANCE IN MEETING COSTS/PRICE, TECHNICAL, AND DELIVERY OBJECTIVES. POINTS OF CONTACT PROVIDED, MAY BE CONTACTED TO CONFIRM INFORMATION PROVIDED AND TO GATHER INFORMATION ON TECHNICAL PERFORMANCE, QUALITY, LIFE CYCLE COST AND/OR RELIABILITY. THE RESULTS MAY BE USED IN THE OVERALL COMPARATIVE EVALUATION OF THE OFFEROR (S) IN ACCORDANCE WITH SECTION M OF THE REQUEST FOR PROPOSAL.

List Performance Data on your five most recently completed Federal Government contracts (not to exceed three years since completion) for like or similar items under this RFP. (If you do not have five Federal Government contracts, then list state, local, or commercial contracts, in that order, to complete this report)

Contractor Name:

Address:

Division:

RFP #:

POC: (Person who can verify data)

Telephone:

FAX:

CONTRACT INFORMATION

Contract Number:

Contract Type: Fixed Price

Item Description:

Contract Quantity/Length of Service:

Customer Name:

Address:

Date Completed:

Cost Reimbursement Other (Specify)

Customer POC: (Person who can verify data)

Telephone:

FAX:

QUALITY

NOTE: An explanation must accompany all answers with an asterisk(*).

Was consideration or a monetary withhold for non-conforming supplies/services or late deliveries assessed against this contract?

YES* ____ NO ____ (Explanation)

Was/is any part of this contract terminated for default and/or litigation?

YES* ____ NO ____ (Explanation)

Was any warranty work completed on delivered items?

YES* ____ NO ____ (Explanation)

Did you receive any quality awards in the past three years?

YES* ____ NO ____ (List Awards)

TIMELINESS

Were all items (including products, services, reports, etc.) delivered within the original contract schedule?

YES ____ NO * ____ (Explanation)

COST FOR COST TYPE CONTRACTS:

Was the original contract estimated cost met?

YES ____ NO* ____ (Explanation)

If the estimated cost was not met, what was the positive/negative percentage of change?

+ ____ -

OTHER PERTINENT INFORMATION

Describe any corrective action(s) initiated to solve any of the above-described problems/deficiencies on this contract. Discuss the success of the corrective action(s) taken.

OFFEROR REPRESENTATIONS AND CERTIFICATIONS -- COMMERCIAL ITEMS (MAY 2001)(FAR 52.212-3)

(a) Definitions. As used in this provision:

"Emerging small business" means a small business concern whose size is no greater than 50 percent of the numerical size standard for the NAICS code designated.

"Forced or indentured child labor" means all work or service-

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process of penalties.

"Service-disabled veteran-owned small business concern"-

(1) Means a small business concern-

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

"Veteran-owned small business concern" means a small business concern-

(1) Not less than 51 percent of which is owned by one or more veterans(as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern --

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Taxpayer identification number (TIN) (26 U.S.C. 6109, 31 U.S.C. 7701). (Not applicable if the offeror is required to provide this information to a central contractor registration database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (b)(3) through (b)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.]

(3) Taxpayer Identification Number (TIN).

* TIN: _____.

* TIN has been applied for.

* TIN is not required because:

* Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

* Offeror is an agency or instrumentality of a foreign government;

* Offeror is an agency or instrumentality of the Federal Government;

(4) Type of organization.

* Sole proprietorship;

* Partnership;

* Corporate entity (not tax-exempt);

* Corporate entity (tax-exempt);

* Government entity (Federal, State, or local);

* Foreign government;

* International organization per 26 CFR 1.6049-4;

* Other _____.

(5) Common parent.

* Offeror is not owned or controlled by a common parent:

* Name and TIN of common parent:

Name _____

TIN _____

(c) Offerors must complete the following representations when the resulting contract is to be performed inside the United States, its territories or possessions, Puerto Rico, the Trust Territory of the Pacific Islands, or the District of Columbia. Check all that apply.

(1) Small business concern. The offeror represents as part of its offer that it * is, * is not a small business concern.

(2) Veteran-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that it * is, * is not a veteran-owned small business concern.

(3) Service-disabled veteran-owned small business concern. [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.] The offeror represents as part of its offer that it * is, * is not a service-disabled veteran-owned small business concern.

(4) Small disadvantaged business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, for general statistical purposes, that it * is, * is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) Women-owned small business concern. [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it * is, * is not a women-owned small business concern.

Note: Complete paragraphs (c)(6) and (c)(7) only if this solicitation is expected to exceed the simplified acquisition threshold.

(6) Women-owned business concern (other than small business concern). [Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.]. The offeror represents that it * is, a women-owned business concern.

(7) Tie bid priority for labor surplus area concerns. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:

(8) Small Business Size for the Small Business Competitiveness Demonstration Program and for the Targeted Industry Categories under the Small Business Competitiveness Demonstration Program. [Complete only if the offeror has represented itself to be a small business concern under the size standards for this solicitation.]

(i) (Complete only for solicitations indicated in an addendum as being set-aside for emerging small businesses in one of the four designated industry groups (DIGs).) The offeror represents as part of its offer that it * is, * is not an emerging small business.

(ii) (Complete only for solicitations indicated in an addendum as being for one of the targeted industry categories (TICs) or four designated industry groups (DIGs).) Offeror represents as follows:

(A) Offeror's number of employees for the past 12 months (check the Employees column if size standard stated in the solicitation is expressed in terms of number of employees); or

(B) Offeror's average annual gross revenue for the last 3 fiscal years (check the Average Annual Gross Number of Revenues column if size standard stated in the solicitation is expressed in terms of annual receipts).

(Check one of the following):

<u>Number of Employees</u>	<u>Average Annual Gross Revenues</u>
50 or fewer	\$1 million or less
51-100	\$1,000,001-\$2 million
101-250	\$2,000,001-\$3.5 million
251-500	\$3,500,001-\$5 million
501-750	\$5,000,001-\$10 million
751-1,000	\$10,000,001-\$17 million
Over 1,000	Over \$17 million

(9) [Complete only if the solicitation contains the clause at FAR 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR 52.219-25, Small Disadvantaged Business

Participation Program-Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.]

(i) General. The offeror represents that either-

(A) It * is, * is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net), and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It * has, * has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns. The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(7)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: _____.]

(d) Representations required to implement provisions of Executive Order 11246 --

(1) Previous contracts and compliance. The offeror represents that --

(i) It * has, * has not, participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It * has, * has not, filed all required compliance reports.

(2) Affirmative Action Compliance. The offeror represents that --

(i) It * has developed and has on file, * has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 CFR parts 60-1 and 60-2), or

(ii) It * has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) Certification Regarding Payments to Influence Federal Transactions (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$100,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract.

(f) Buy American Act - Balance of Payments Program Certificate. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act - Balance of Payments Program--Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product (as defined in the clause of this solicitation entitled "Buy American Act - Balance of Payments Program--Supplies") and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

(2) Foreign End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN

[List as necessary]

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)

(1) Buy American Act -- North American Free Trade Agreement -- Israeli Trade Act -- Balance of Payments Program Certificate. (Applies only if the clause at FAR 52.225-3, Buy American Act -- North American Free Trade Agreement Israeli Trade Act -- Balance of Payments Program, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product as defined in the clause of this solicitation entitled "Buy American Act -- North American Free Trade Agreement Israeli Trade Act -- Balance of Payments Program" and that the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States.

(ii) The offeror certifies that the following supplies are NAFTA country end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-North American Free Trade Agreement-Israeli Trade Act-Balance of Payments Program":

NAFTA Country or Israeli End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN

[List as necessary]

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) or this provision) as defined in the clause of this solicitation entitled "Buy American Act-North American Free Trade Agreement-Israeli Trade Act-Balance of Payments Program." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products.

Other Foreign End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN

[List as necessary]

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) Buy American Act-North American Free Trade Agreements-Israeli Trade Act-Balance of Payments Program Certificate, Alternate I (Feb 2000). If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)

(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act-North American Free Trade Agreement-Israeli Trade Act-Balance of Payments Program":

Canadian End Products

Line Item No.: _____

[List as necessary]

(3) Buy American Act-North American Free Trade Agreements-Israeli Trade Act-Balance of Payments Program Certificate, Alternate II (Feb 2000). If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act--North American Free Trade Agreement--Israeli Trade Act--Balance of Payments Program":

Canadian or Israeli End Products

Line Item No.:	Country of Origin:

[List as necessary]

(4) Trade Agreements Certificate. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(4)(ii) of this provision, is a U.S.-made, designated country, Caribbean Basin country, or NAFTA country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products.

Other End Products

Line Item No.:	Country of Origin:

[List as necessary]

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items subject to the Trade Agreements Act, the Government will evaluate offers of U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products without regard to the restrictions of the Buy American Act or the Balance of Payments Program. The Government will consider for award only offers of U.S.-made, designated country, Caribbean Basin country, or NAFTA country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) Certification Regarding Debarment, Suspension or Ineligibility for Award (Executive Order 12549). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that --

(1) The offeror and/or any of its principals * are, * are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(2) * Have, * have not, within the three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property;

(3) * Are, * are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses; and

(4)

(i) The offeror, aside from the offenses enumerated in paragraphs (1), (2), and (3) of this paragraph (h), *has *has not within the past three years, relative to tax, labor and employment, environmental, antitrust, or consumer protection laws--

(A) Been convicted of a Federal or state felony (or has any Federal or state felony indictments currently pending against them); or

(B) Had a Federal court judgment in a civil case brought by the United States rendered against them; or

(C) Had an adverse decision by a Federal administrative law judge, board, or commission indicating a willful violation of law.

(ii) If the offeror has responded affirmatively, the offeror shall provide additional information requested by the Contracting Officer.

(i) Certification Regarding Knowledge of Child Labor for Listed End Products (Executive Order 13126). [The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at 22.1503(b).]

(1) Listed End Product

Listed End Product	Listed Countries of Origin:

(2) Certification. [If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.]

[] (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

[] (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(End of Provision)

OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (DFAR 252.212-7000) (NOV 1995)

(a) *Definitions.*

As used in this clause--

(1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec. 2415).

(2) "United States person" defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concern, as determined under regulations of the President.

(b) *Certifications.*

By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec. 2407(a) prohibits a United States person from taking.

(c) *Representation of extent of Transportation by Sea.* (This representation does not apply to solicitations for the direct purchase of ocean transportation services).

(1) The Offeror shall indicate by checking the appropriate blank in paragraph (c)(2) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term "supplies" is defined in the Transportation of Supplies by Sea clause of this solicitation.

(2) *Representation.*

The offeror represents that it--

_____ Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

_____ Does not anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

(3) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense Federal Acquisition Regulation Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

**BUY AMERICAN--BALANCE OF PAYMENTS PROGRAM CERTIFICATE (DEC 1991)
(DFARS 252.225-7000)**

(a) *Definitions.*

"Domestic end product," "qualifying country," "qualifying country end product," and "nonqualifying country end product" have the meanings given in the Buy American Act and Balance of Payments Program clause of this solicitation.

(b) Evaluation.

Offers will be evaluated by giving preference to domestic end products and qualifying country end products over nonqualifying country end products.

(c) Certifications.

(1) The offeror certifies that--

(i) Each end product, except those listed in paragraphs (c)(2) or (3) of this clause, is a domestic end product; and

(ii) Components of unknown origin are considered to have been mined, produced, or manufactured outside the United States or a qualifying country.

(2) The Offeror certifies that the following end products are qualifying country end products:

Qualifying Country End Products	
Line Item Number	Country of Origin
<hr/>	
(List only qualifying country end products)	

(3) The Offeror certifies that the following end products are nonqualifying country end products:

Nonqualifying Country End Products	
Line Item Number	Country of Origin
<hr/>	

HAZARD WARNING LABELS (DEC 1991) (DFAR 252.223-7001)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

- (1) Federal Insecticide, Fungicide and Rodenticide Act;
- (2) Federal Food, Drug and Cosmetics Act;
- (3) Consumer Product Safety Act;
- (4) Federal Hazardous Substances Act; or
- (5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL	ACT
(If None, Insert "None")	
<hr/>	
<hr/>	

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 1996) (FAR 52.223-13)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986

(EPCRA) (42 U.S.C.11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as

described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned and operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons:

(Check each block that is applicable.)

☐ (i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

☐ (ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023 (b)(1)(A);

☐ (iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

☐ (iv) The facility does not fall within Standard Industrial Certification Code (SIC) designations 20 through 39 as set forth in section 19.102 of the Federal Acquisition Regulations; or

☐ (v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

QUALIFYING COUNTRY SOURCES AS SUBCONTRACTORS (DEC 1991) (DFAR 252.225-7002)

Subject to the restrictions in section 225.872 of the Defense FAR Supplement, the Contractor shall not preclude qualifying country sources and U.S. sources from competing for subcontracts under this contract.

HYBRID SPECIFICATION
CARTRIDGE, CALIBER 5.56MM, FRANGIBLE

CRANE DIVISION NAVAL SURFACE WARFARE CENTER ORDNANCE ENGINEERING DIRECTORATE (Code 40) WEAPONS DEPARTMENT (Code 408) AMMUNITION BRANCH (Code 4083)			
	ACTIVITY APPROVALS	CODE	DATE
PREPARER		4083	
BRANCH MANAGER		4083	
DEPARTMENT MANAGER		408	

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1305

**HYBRID SPECIFICATION
CARTRIDGE, CALIBER 5.56MM, FRANGIBLE**

1. SCOPE

1.1 This specification establishes the product and performance requirements for the Cartridge, Caliber 5.56mm, Frangible. This ammunition shall be referred to herein as 5.56mm Frangible.

2. APPLICABLE DOCUMENTS

2.1 Government Documents. The following documents of the latest issues shown form a part of the specification to the extent specified herein. In the event of a conflict between this specification and other documents referenced herein, requirements of this specification shall apply.

SPECIFICATIONS

Military

MIL-L-63460	Lubricant, Cleaner and Preservative for Weapons and Weapons Systems
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STANDARDS

Military

MIL-STD-286	Propellants, Solid: Sampling, Examination and Testing
MIL-STD-636	Visual Inspection Standards for Small Arms Ammunition Through Caliber .50
MIL-STD-644	Visual Inspection Standards and Inspection Standards for Inspection of Packaging, Packing and Marking of Small Arms Ammunition
MIL-STD-1168	Ammunition Lot Numbering Shipment
DOD-STD-2101	Classification of Characteristics

DRAWINGS

3. REQUIREMENTS

3.1 General.

3.1.1 Item Definition. The cartridge described by this specification is 5.56mm Frangible ammunition, and is intended to be used in the 14½ inch barreled M4A1 carbine and M249 Squad Automatic Weapon (SAW) without modification.

3.1.2 Precedence. The cartridge shall comply in order of precedence with the contract, this specification and documents referenced herein.

3.2 Components.

3.2.1 Projectile. (C1) [The projectile shall not contain lead.]

3.2.1.1 The projectile diameter along the cylindrical bore bearing surface shall be 0.2245 inch maximum, 0.2239 inch minimum.

3.2.2 Cartridge Case. The cartridge case shall be constructed of copper alloy in accordance with ASTM B19-86 and shall not be plated. The cartridge case shall meet the external dimensional requirements of Drawing 9378276 or Drawing 11820451. (C2) [A vent hole shall be present in the primer pocket of the cartridge case.]

3.2.2.1 The cartridge case headstamp marking shall consist of the Identification Code of the Manufacturer and last 2 digits of year of manufacture.

3.2.3 Propellant. (C3) [Each cartridge shall contain smokeless propellant.] Nominal charge weight shall be established by the manufacturer to meet performance requirements.

3.2.4 Primer. The primer shall not contain lead.

3.3 Complete Cartridge.

3.3.1 Primer Seating Depth. (M101) [The primer shall be seated flush to 0.008 inch below flush] of the face of the cartridge case head.

3.3.2 Cartridge Overall Length. (M102). The overall length of the assembled cartridge shall be 2.260 inches maximum, 2.165 inches minimum.

3.3.3 Bullet Extraction. The force required to extract the projectile from the cartridge case shall be 25 pounds minimum.

3.4 Cartridge Ballistics Tests.

3.4.1 Chamber Pressure.

3.4.1.1 (M103) The average chamber pressure (corrected) of sample cartridges, conditioned at $70^{\circ} \pm 2^{\circ}\text{F}$ shall not exceed 55,000 pounds per square inch (psi). Neither the chamber pressure of an individual sample test cartridge nor the average chamber pressure plus three standard deviations of chamber pressure shall exceed 61,000 psi.

3.4.1.2 (M104) The average peak chamber pressure (corrected) of sample cartridges, conditioned at $125^{\circ} \pm 2^{\circ}\text{F}$ and $-25^{\circ} \pm 2^{\circ}\text{F}$ shall not vary from the average chamber pressure of the sample test cartridges conditioned at $70^{\circ} \pm 2^{\circ}\text{F}$ by more than 7,000 psi. The average chamber pressures of the sample cartridges of the same lot conditioned at $120^{\circ} \pm 5^{\circ}\text{F}$ shall not exceed 60,000 psi. Any decrease in chamber pressure is acceptable.

3.4.2 Accuracy. The extreme spread of nine of each ten groups and the average of ten groups shall be 6.0 inches maximum at 100 yards using a 14½ inch barreled M4A1 carbine. Five shots shall be fired for each group.

3.4.3 Function and Casualty. The 5.56mm Frangible ammunition shall meet the function and casualty accept/reject requirements of Table I for the 14½ inch barreled M4A1 carbine and M249 SAW. Misfires shall be considered separately in accordance with Table I.

3.4.4 Penetration. (M105). Fired from a 14½ inch barreled carbine, the frangible projectiles must not penetrate or crack 3/8 inch AR500 armor plate when 20 rounds are fired at a NATO angle of 0° into a ½ inch diameter impact area from a distance of 5 feet. A penetration or crack occurs when a projectile or fragment has penetrated the armor sufficiently to permit the passage of light through a hole or crack developed in the armor,

or when the projectile lodged in the armor can be seen from the rear of the plate.

3.4.5 Ballistic Match. (M106). Fired from a 14½ inch barreled M4A1 carbine, the center of impact of 5.56mm Frangible ammunition shall be no more than 2½ inches away from the center of impact of the M855 cartridge at 100 yards.

3.4.6 Bullet Integrity. (C4). The 5.56mm Frangible projectile shall not break either in its passage through the barrel or in flight when fired from the respective weapons at temperatures ranging from -25°F to 125°F.

3.4.7 Function and Casualty defects in ballistic test. For any ballistic test except function and casualty where the occurrence of a firing defect, the following shall apply:

a. The defect shall be recorded under the appropriate function and casualty defect category and included in the defect count for determining acceptance or rejection in accordance with Table I.

b. A replacement round shall be fired to obtain the data for the characteristic being tested if the occurrence of a firing defect prevents the obtaining of a valid data for the characteristic being tested.

c. The particular test for which the round was fired shall not be penalized.

3.5 Workmanship. Metallic components and the completed cartridge shall be free from folds, wrinkles, deep draw scratches, scaly metal, dents, burrs and other defects. All components and the completed cartridge shall be free of foreign material including, but not limited to, corrosion, stains, dirt, oil, grease, smears of lacquer and metal chips. The cartridge and components shall meet the visual standards requirements of MIL-STD-636 (NATO caliber 7.62mm Section). Classification of individual visual and workmanship characteristics shall be as defined by MIL-STD-636. For mixed ammunition types, the occurrence of a high pressure test, dummy or blank cartridge shall be classed as a critical defect. Occurrence of any other type shall be classed as a major defect.

TABLE I

FUNCTION AND CASUALTY DEFECT CLASSIFICATION AND ACCEPT/REJECT CRITERIA 1/

Characteristic 2/ NO.	Classification	FIRST SAMPLE ACCEPT/REJECT		CUMULATIVE ACCEPTANCE
1. Misfire 3/	(M107)	1	3	2
2. Bullet remaining in bore 4/	(C5)	0	1	-
3. Primer leaks				
a. Perforation in firing pin indent in primer cup				
(1) M4A1 carbine	(M108)	1	3	2
(2) M249 Machine gun	(M109)	1	3	2
b. Escape of gas through primer cup (excluding 3.a. above)	(M110)	1	3	2
c. Escape of gas around primer cup				
(1) 50% or more than 50% of periphery	(minor)	3	7	9
(2) Less than 50% of periphery	(minor)	5	9	13
d. Blown primer - Primer separates from casehead and primer pocket is grossly distorted. 4/	(C6)	0	1	-
e. Dropped primer - Primer falls out of pocket upon retraction of bolt	(M111)	0	2	1
f. Loose primer - Primer remains in pocket but is physically loose Vent area	(M112)	0	2	2
4. Case casualties				
a. Longitudinal split 5/				
(1) Neck and shoulder (I or S)	(minor)	5	9	13
(2) Body (J)	(minor)	3	7	9
(3) Body (K)	(M113)	0	2	1
(4) To head (L)	(M114)	0	2	1
(5) Through head (M)	(M115)	0	2	1
b. Circumferential rupture 5/				
(1) Partial, shoulder or body (J and S)	(M116)	1	3	2
(2) Partial, body (K) 4/	(C7)	0	1	-
(3) Partial, head (L) 4/	(C8)	0	1	-
(4) Complete 4/	(C9)	0	1	-
5. Weapon Stoppage	(M117)			
a. M4A1 Carbine		12	18	24
b. M249 SAW		6	8	12

1/ The acceptance and retest numbers of Table I shall be as follows:

- a. The acceptance and retest numbers shall be applied to the M249 results (all temperature combined) and the M4A1 results (all temperature combined) individually.

- b. All function and casualty defects observed in ballistic tests shall be included in the defect counts of weapon type that was used in the test.
- c. If function and casualty defects occurred in a test barrel, then the defects shall be included in both the M4A1 and M249 defect counts.
- d. When either weapon test is failed and a retest is permitted by Table I, both weapon tests shall be repeated in accordance with Appendix B with sample sizes specified in TABLE V. The cumulative (1st and 2nd test combined) defect count shall be evaluated against the cumulative acceptance criteria of Table I for both the M4A1 and M249 individually.

2/ For definition of characteristics see 6.1.

3/ Each cartridge that misfires shall be disassembled and examined to determine the cause of the misfire.

a. The lot shall be rejected if the cartridge does not meet the critical requirements of paragraph 3.2.2 (presence of primer pocket vent hole) or paragraph 3.2.3 (presence of propellant charge).

b. If the misfire is attributed to the test weapon, then the weapon shall be repaired or replaced and another cartridge fired in place of the misfire.

4/ No second sample permitted. Lot shall be rejected.

5/ For location of defects indicated by letters in parentheses, see Drawing C7643674.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified herein, in the contract or in the purchase order, the supplier is responsible for the performance of all inspection and test requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial facility acceptable to the Government. The Government reserves the right to perform any of the inspections and tests set forth in this specification where such inspections and tests are deemed necessary to ensure that supplies and

services conform to prescribed requirements. Unless otherwise specified herein, in the contract or in the purchase order, all test and inspection equipment (including test barrels and test weapons) shall be supplied and maintained by the contractor.

4.1.1 Responsibility for Compliance. All items shall meet all requirements of sections 3 and 5. The inspections set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

4.1.2 Quality Assurance Terms and Definitions. Reference shall be made to ANSI/ASQC A8402-1994 for definitions of quality assurance terms.

4.1.3 Lot Formation. Each inspection lot of cartridges shall be submitted in accordance with ANSI/ASQC Z1.4-1993. Lot size shall be 200,000 cartridges minimum and 500,000 cartridges maximum. Each lot shall be assigned a lot number in accordance with MIL-STD-1168. Only one type and weight of propellant shall be used in a lot of cartridges. Each lot shall contain no more than one lot of primers and one lot of propellant. Individual components manufactured by more than one contractor shall not be used in a lot of cartridges.

4.1.4 Primer Lots. The size of any lot of primers used in the cartridges shall be 200,000 units minimum and 1,000,000 units maximum. A primer lot shall consist of a specific product, made on consecutive work shifts, with no break in the production of that specific product.

4.2 Inspection Provisions. Unless otherwise specified herein, the contract or purchase order, the sampling plans and acceptance criteria of ANSI/ASQC Z1.4 shall be used for nondestructive acceptance inspection of major and minor defects. Inspection shall be by characteristic. Unless otherwise specified the Acceptance Quality Level (AQL) shall be .25 for the inspection of major defects and the AQL shall be .65 for the

inspection of minor defects. A portion of the Single Sampling Plan (for normal inspection), from ANSI/ASQC Z1.4, is detailed in Table II and Table III. Unless otherwise specified, one hundred percent inspection shall be used for all non-destructive inspection of critical characteristics. The acceptance criteria shall be to accept on zero defects and reject on one or more defects for the inspection of critical characteristics. Section 3 and 5 requirements that are not annotated as critical or major shall be classified as minor. Unless otherwise specified, each lot of components and each lot of cartridges shall be inspected in accordance with 4.2.1 through 4.3.2.5 as applicable. Classification of characteristics shall be defined in accordance with DOD-STD-2101.

4.2.1 Workmanship. Cartridges and components shall be visually inspected to determine compliance with the requirements of 3.2.2, 3.2.2.1 and 3.5.

4.2.2 Packaging, packing, palletizing and marking. During or immediately prior to the packaging operation, 100% examination of the cartridges shall be performed to ascertain that the cartridge type conforms to the requirements of 3.5. All non-conforming cartridges shall be rejected. Inspection of packaging, packing, palletizing and marking shall be in accordance with MIL-STD-644A.

4.2.3 Dimensional/Weight Verifications. Dimensional and weight requirements as specified in 3.2.1.1, 3.2.2, 3.3.1 and 3.3.2 shall be verified by contractor gages or by Standard Measuring Instruments (SMI).

4.2.4 Automatic/Visual Inspection. The contractor shall verify presence of primer pocket vent hole, 3.2.2, and presence of propellant charge, 3.2.3, by visual inspection or by automated equipment using probes or other sensing devices.

4.2.5 Certifications. Contractor shall maintain certificates of compliance for the material requirements of 3.2.1 through 3.2.4. Certifications shall be available upon request for each production lot.

TABLE II
Inspection Level

<u>Referenced AQL</u>	<u>Inspection Level</u>
0.040	I
0.065	II
0.100	III
0.150	IV
0.250	V
0.400	VI
0.650	VII
1.000	VIII
1.500	IX
2.500	X
4.000	XI
6.500	XII

TABLE III

SINGLE SAMPLING PLANS FOR NORMAL INSPECTION

Lot Size	Sample Size for Normal Inspection Level	Acceptance Quality Levels (normal inspection)											
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
		Ac RE	Ac RE	AC RE	AC RE	AC RE	AC RE	AC RE	AC RE	AC RE	AC RE	AC RE	AC RE
2 – 8	2	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1
9 – 15	3	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	1 2
18 – 25	5	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	1 2	1 2
26 – 50	8	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	1 2	1 2	1 2
51 – 90	13	0 1	0 1	0 1	0 1	0 1	0 1	0 1	0 1	1 2	1 2	1 2	2 3
91 – 150	20	0 1	0 1	0 1	0 1	0 1	0 1	0 1	1 2	1 2	1 2	2 3	3 4
151 – 280	32	0 1	0 1	0 1	0 1	0 1	0 1	1 2	1 2	1 2	2 3	3 4	5 6
281 – 500	50	0 1	0 1	0 1	0 1	0 1	1 2	1 2	1 2	2 3	3 4	5 6	7 8
501 – 1200	80	0 1	0 1	0 1	0 1	1 2	1 2	1 2	2 3	3 4	5 6	7 8	10 11
1201 – 3200	125	0 1	0 1	0 1	1 2	1 2	1 2	2 3	3 4	5 6	7 8	10 11	14 15
3201 – 10000	200	0 1	0 1	1 2	1 2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22
10001 - 35000	315	0 1	1 2	1 2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	21 22
35001 - 150000	500	1 2	1 2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	21 22	21 22
150001 - 500000	800	1 2	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	21 22	21 22	21 22
500001 - Over	1250	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	21 22	21 22	21 22	21 22

AC = Acceptance number.

RE = Rejection number

TABLE IV
TEST REQUIREMENTS

<u>Tests</u>	Temperature Conditioning Range and Sample Size			<u>Requirement</u>	<u>Test</u>
	-27°F to -23°F	68°F to 73°F	123°F to 127°F		
Cartridge					
1. Bullet Extraction		40		3.3.3	4.3.1.1
<u>Cartridge Ballistics Tests 1/</u>					
1. Chamber Pressure/Velocity 2/	40	80 3/	40	3.4.1	4.3.2.1
2. Accuracy		200		3.4.2	4.3.2.2
3. Function and Casualty					
a. M4A1 4/	240	480	480	3.4.3	4.3.2.3
b. M249 4/	400	400	400	3.4.3	4.3.2.3
5. Penetration		80		3.4.4	4.3.2.4
7. Ballistic Match		60		3.4.5	4.3.2.5
8. Bullet Integrity 5/				3.4.6	

1/ The results of all ballistics tests, including examination of misfired cartridges and fired cartridge cases and primers, shall be used to determine compliance with the requirements of Table I. The occurrence of any critical defects attributable to the cartridges (including firings of warm and foul cartridges from the test lot) shall result in rejection of the lot and no further testing shall be conducted.

2/ Unless otherwise substantiated that the applicable chamber pressure requirements are met, chamber pressure testing shall be completed and the applicable requirements shall be met prior to conducting any other ballistic tests. Acceptable methods of substantiating that the chamber pressure requirements have been met are in process chamber pressure checks, or propellant checks, or propellant acceptance tests. These acceptable methods do not eliminate the requirement to perform chamber pressure testing. The contractor shall submit substantiating documentation to and receive approval from the Contracting Officer for each lot that will not be subjected to chamber pressure testing prior to other ballistic tests.

3/ Forty samples shall be fired with the propellant positioned at the primer end of the cartridge and the other forty samples shall be fired with the propellant intentionally positioned at the projectile end of the cartridge. The latter requirement shall be accomplished by rotating each cartridge and inserting it into the test barrel in such a manner as to ensure that the propellant is positioned at the base of the projectile. Reference cartridges and all other chamber pressure test samples shall be fired with the propellant at the primer end of the cartridge per SCATP-5.56mm. Each 40 round sample shall meet the requirement of 3.4.1.

4/ See Table V.

5/ The test shall be performed concurrently with chamber pressure and velocity, accuracy, function and casualty and ballistic match testing.

4.3 Test Provisions. Unless otherwise specified, each lot of components and each lot of cartridges shall be tested in accordance with 4.3.1, 4.3.2 and Table IV as applicable. Unless otherwise specified, all testing shall be conducted with samples

conditioned at $70^{\circ}\pm 5^{\circ}\text{F}$ for a minimum of two hours. Cartridges shall be randomly selected in such a manner that the sample is representative of the lot. The cartridges shall be thoroughly mixed before being divided into sample groups for each test. If an equipment/weapon failure occurs which prevents the obtaining of a reliable test result, then the equipment/weapon shall be replaced or repaired; the individual test cartridge result shall be disregarded and another sample cartridge shall be fired for record. If the equipment/weapon failure prevented the obtaining of reliable results for the entire test series, then the entire test result shall be disregarded and a complete sample shall be fired for record. If a firing defect occurs which is not attributable to the test conditions, and which prevents obtaining a reliable result for the test, an additional cartridge shall be fired in its place; the test shall not be penalized, but the defect shall be counted in the cumulative ballistics sample for Table I.

4.3.1 Cartridge Tests.

4.3.1.1 Bullet Extraction. The cartridge shall be secured in the test machine so that the extraction force is collinear with the cartridge central axis. The cartridge case shall be held in such a manner that the projectile is not pinched. The extraction force shall be applied by using a test machine crosshead travel rate (pulling rate) of 0.20 to 0.30 inches per minute. Each sample shall be tested to failure and the maximum load occurring during projectile separation from the cartridge case shall be recorded. (If the projectile pulling collet or jaws slips off the projectile, and the force exceeded the extraction force requirement of 3.3.4, then it shall be considered a valid test. If the force did not exceed the requirement of 3.3.3, then it shall be considered a non-test.) The lot shall be rejected if two or more cartridges fail to meet the requirements of 3.3.3.

4.3.2 Cartridge Ballistic Tests. Each lot of cartridges shall be subjected to the following ballistics tests. Unless otherwise specified in the contract or purchase order, reference cartridges shall be supplied by the contractor as required for calibration of acceptance test equipment, for verification of calibration during lot acceptance testing, and for applying correction factors to test results. Specified barrel length of test weapons shall be determined by measuring from the breech face of the test weapon to the end of the muzzle.

4.3.2.1 Chamber Pressure. The test shall be conducted in accordance with SCATP-5.56mm. Velocity and port pressure data shall be recorded for informational purposes. The lot shall be rejected if the average peak chamber pressure of any test sample at any temperature range fails the requirements of 3.4.1 or if one or more cartridges fails the individual sample requirements of 3.4.1.

4.3.2.2 Accuracy. The accuracy test shall be conducted in accordance with Appendix A. The lot shall be rejected if the average extreme spread and/or one or more individual group extreme spread fails the requirements of 3.4.2.

4.3.2.3 Function and Casualty. The function and casualty test shall be conducted in accordance with Appendix B. The misfire requirement of 3.4.3 shall be met. The acceptance/rejection shall be as shown in Table I.

4.3.2.4 Penetration. The 3/8 inch AR500 armor plate penetration tests shall be conducted. The requirements of 3.4.4 shall be met. The lot shall be rejected if the penetration result does not meet the requirements of 3.4.4.

4.3.2.4.1 AR500 Armor Plate. This test shall be performed using one 14½ inch barreled carbine. The 3/8 inch AR500 armor plate (48" X 48" X ") shall be placed at a distance of 5 feet down-range of the muzzle of the test weapon. The test weapon shall be loaded with on cartridge and the projectile shall be fired at the steel plate with NATO angle of $0^{\circ} \pm 5^{\circ}$. A total of 20 shots shall be fired from a test weapon into a ½ inch diameter impact area. The lot shall be rejected if penetration fails the requirements of paragraph 3.4.4.

4.3.2.5 Ballistic Match. The ballistic match test shall be conducted in accordance with Appendix E. The lot shall be rejected if the test result does not meet the requirement of 3.4.6.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be specified in the contract or order (see 6.2). When actual packaging of material is performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

6.1 Definitions.

- a. Misfire: Failure of a cartridge to fire after the initiating impulse has been applied to the primer, normally due to:
 - (1) The primer fails to fire when struck by the firing pin.
 - (2) The propellant does not ignite when the primer fires.
- b. Hangfire: Any perceptible delay in the functioning of a cartridge after the initiating impulse has been applied to the primer.
- c. Blown primer: A blown primer is a primer which, when the cartridge is fired, is separated completely from the head of the cartridge case, and both the head of the case and primer pocket are enlarged and deformed.
- d. Longitudinal split: A longitudinal separation of the metal in the cartridge case wall produced by firing.
- e. Circumferential rupture: A circumferential separation of the cartridge case wall produced by firing. A partial rupture is one which extends less than 360 degrees around the case. A complete rupture is one which extends entirely around the case, separating the case into two parts.

f. Premature cartridge function: A premature function of the cartridge prior to intentional initiation of the firing mechanism of the weapon. Such failures usually occur during cycling of the weapon mechanism and prior to complete locking of the weapon's bolt.

g. Loose primer: Independent movement of primer in cartridge case primer pocket or primer falls out of pocket.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number and date of the specification.
- b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1).
- c. Packaging requirements (see 5.1).

APPENDIX A**A. ACCURACY TEST PROCEDURE**

A.1 Scope. The accuracy test shall be performed to determine the uniformity and dispersion of the bullets at a specified distance from the test weapon.

A.2 Equipment.

A.2.1 Weapon. The test weapons shall consist of two 14½ inch barreled M4A1 carbines. A maximum of ten targets shall be fired upon by each test weapon (five shots per target).

A.2.2 Mount. The weapons shall be supported during testing by mounting in suitable fixtures as required to permit manual operation of the test weapon. The test fixtures shall be constructed and mounted so as to prevent fixture movement during testing. It is very important that the weapon maintains its original position from shot to shot.

A.2.3 Targets. All test targets shall be rigidly mounted at the specified test range from the muzzle of the test weapon.

A.2.4 Range. The firing range shall be arranged such that the specified test range is maintained from the muzzle of the test weapon to the face of the test targets.

A.3 Test Procedure.

A.3.1 Cartridge examination. If visual defects are found in the test cartridges prior to testing, the defective cartridge(s) shall be replaced. Table IV shows the number of rounds to be fired at each temperature range.

A.3.2 Cartridge Conditioning. The required number of test cartridges shall be permitted to come to a temperature of 60° to 80°F prior to being placed in the controlled temperature room or container. The cartridges shall be placed in a controlled temperature room or container in such a manner that all the cartridges are subjected to an uniform temperature for a minimum of two hours, prior to firing. The room or container shall be maintained at 70°±2° F and be of sufficient capacity to allow free circulation of air.

A.3.3 Weapon preparation. One 14 1/2 inch barreled M4A1 carbine shall be rigidly mounted on the test fixture. The test fixture shall be constructed and mounted so as to prevent fixture movement during testing. It is very important that the weapon maintains its original position from shot to shot. The chamber and the bore of the test weapon shall be thoroughly cleaned and wiped dry prior to firing.

A.3.4 Firing.

A.3.4.1 The target shall be rigidly mounted at a distance of 100 to 101 yards from the muzzle of the test weapon.

A.3.4.2 A sheet of 24" x 40" target paper shall be placed 5 feet from the muzzle of the test barrel to check occurrence of the projectile breakage.

A.3.4.3 A minimum of three unrecorded cartridges of the type of ammunition under test shall be fired to assure that the test weapon is correctly sighted on the target, to warm and foul the weapon, and to settle the weapon in the test fixtures.

A.3.4.4 After the warming and fouling cartridges have been fired, the target shall be changed so as to present a fresh surface for the succeeding rounds. Thereafter, the target shall be changed after each group of five cartridges has been fired.

A.3.4.5 All cartridges shall be singly loaded into the chamber of the test weapon. The required number of cartridges are removed from the controlled-temperature room or container and placed at a point convenient to the technician, provided temperature of the firing room is $70^{\circ}\pm 2^{\circ}$ F. Otherwise the cartridges shall be placed in an insulated box (five cartridges at a time) which has been conditioned at $70^{\circ}\pm 2^{\circ}$ F, and the box placed at a point convenient to the technician. The cartridges are then removed singly from the insulated box immediately before firing. If an insulated box is not available, then the cartridges shall be removed singly from the controlled-temperature room or container immediately before firing.

A.3.4.6 Five cartridges shall be fired for record. The target shall be changed and the second five shot group shall be fired in the same manner. This sequence shall be repeated until the specified number of cartridges has been fired on the first test weapon (50 cartridges maximum, plus warm and foul rounds).

A.3.4.7 The temperature of the barrel of the test weapon should be controlled so that the exposed metal surface of the barrel does not become too hot to grasp with the bare hands (approximately 140° F). If the barrel becomes too hot to use, it shall be cooled to ambient temperature before the test is continued. After the barrel has cooled to ambient temperature, two warming (fouling) shot shall be fired prior to continuation of the test.

A.3.4.8 Another 14 1/2 inch barreled M4A1 carbine shall then be placed in the test fixtures and the cartridges shall be tested using the procedures of A.3.4.2 through A.3.4.7 above.

A.3.4.9 Each target shall be measured to determine the maximum extreme spread of each five shot group. This shall be accomplished by measuring the distance between the two outermost bullet holes (the two holes which are farthest apart). The measurement shall be taken from the centers of the holes. Measurements shall be accurate within plus or minus 0.1 inch and results shall be recorded to the nearest one-tenth of an inch.

A.3.4.10 Misfired cartridges and fired cartridge cases and primers shall be retained for further examination.

A.4 Examinations. All fired cartridge cases and primers shall be visually examined to determine compliance with the applicable requirements of Table I. In the event that fired case or primer defects are encountered, or if a misfire(s) occurs, then the test weapon shall be examined to determine if the defect(s) are attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the defect cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. Misfired cartridges and fired cartridge cases and primers shall be retained for further examination.

APPENDIX B**B. FUNCTION AND CASUALTY TEST PROCEDURE**

B.1 Scope. The purpose of the function and casualty test is to determine if the ammunition will perform and function satisfactorily in the weapons for which it has been designed.

B.2 Equipment.

B.2.1 Test Weapons. Test weapons shall be two 14 1/2 inch barreled M4A1 carbines and two each M249 SAW. The M4A1 carbines shall be fired with a suppressor and without a suppressor. No alterations to the test weapons, beyond the requirements and specifications of the original manufacturer or supplier, shall be permitted.

B.3 Test Procedure.

B.3.1 Cartridge examination. If visual defects are found in the test cartridges prior to testing, the defective cartridge(s) shall be replaced.

B.3.2 Cartridge conditioning. Test samples shall be temperature conditioned in loaded magazines (for M4A1 carbines and M249 SAWs) at the specified temperatures for two hours minimum and shall be fired within two minutes after removal from the controlled temperature conditioning chamber.

B.3.3 Weapon preparation. Test weapons and magazines shall be thoroughly cleaned prior to the beginning of testing, but shall not be cleaned again until testing at all temperature ranges has been completed. The test weapons shall be lubricated using Cleaner, Lubricant and Preservative (CLP, MIL-L-63460). The magazine parts shall be wiped with a cloth that was sprayed with CLP prior to assembly. All test magazines shall be serialized so as to maintain identity throughout all testing. The weapons shall be maintained at room temperature (55° F minimum) for a minimum of two hours prior to the start of testing. Test sequence shall be cold temperature condition first, hot; second, and ambient; last for each test weapon.

B.3.4 Firing.

B.3.4.1 Table VI shows the number of rounds to be fired at each temperature range.

TABLE V
FUNCTION AND CASUALTY TEST

<u>Test Weapon</u>	<u>Firing Mode</u>	Temperature Range (°F)		
		-27	68	123
		to	to	to
		<u>-23</u>	<u>72</u>	<u>127</u>
14 inch barreled M4A1 #1 (Suppressed)	Single	30	60	60
14 inch barreled M4A1 #1 (Suppressed)	Burst	30	60	60
14 inch barreled M4A1 #1 (Unsuppressed)	Single	30	60	60
14 inch barreled M4A1 #1 (Unsuppressed)	Burst	30	60	60
14 inch barreled M4A1 #2 (Suppressed)	Single	30	60	60
14 inch barreled M4A1 #2 (Suppressed)	Burst	30	60	60
14 inch barreled M4A1 #2 (Unsuppressed)	Single	30	60	60
14 inch barreled M4A1 #2 (Unsuppressed)	Burst	30	60	60
M249 #1	Burst	200	200	200
M249 #2	Burst	200	200	200

B.3.4.2 Cartridges to be fired from the M4A1 and M249 shall be loaded into 30-round magazines.

B.3.4.3 When firing the M4A1 carbines, barrels shall be forced air cooled to ambient temperature after every 150 rounds fired.

B.3.4.4 During the single mode firing a sheet of 24" x 40" target paper shall be placed 10 feet from the muzzle of the test weapon to check occurrence of the projectile breakage.

B.3.4.5 The M249 SAW shall be fired with the gas regulator set in the normal position. Bursts of 5 to 7 rounds shall be fired at a rate of 85 shots per minute. The barrel shall be forced air cooled after every 200 rounds fired.

B.3.4.6 In the event of a weapon stoppage during the test, the test weapon shall be examined to determine if the stoppage is attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the stoppage cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. In addition to weapon stoppages during firing, the following shall also be considered as weapons stoppages:

- a. Failure of the last cartridge case to eject from the weapon during any sequence of fire.
- b. Failure of the bolt to lock open in the rearward position after firing the last cartridge in each magazine.
- c. Failure of the manually chambered cartridge to fully chamber in the barrel of the weapon.

- d. Failure of any cartridge to completely chamber, fire and completely eject due to residue build-up in the weapon mechanism from previous firings shall be a stoppage that is attributed to the cartridge.

B.3.4.7 Misfired cartridges and fired cartridge cases and primers shall be retained for further examination.

B.3.5 Examinations. All fired cartridge cases and primers shall be visually examined to determine compliance with the applicable requirements of Table I. In the event that fired case or primer defects are encountered, or if a misfire(s) occurs, then the test weapon shall be examined to determine if the defect(s) are attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the defect cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. Misfired cartridges shall be disassembled to determine the cause of the misfire.

B.4 Function and casualty weapons are supplied as Government Furnished Equipment in accordance with the requirements of the contract or purchase order, the contractor shall maintain detailed records (log books) of all cartridges fired through each weapon. These records shall include type of ammunition, lot number, date of firing, personnel conducting the firing, brief summary of firing results, and any unusual occurrence or parts breakage. The log book record shall also include notations each time the weapon is cleaned, when parts are replaced, results of inspections, etc. The log book record shall remain with each weapon throughout the course of the contract and shall be returned to the Government with the weapon when the contract is completed (in accordance with the terms of the contract).

APPENDIX C

C. MATCHING TEST PROCEDURE

C.1 Scope. The matching test shall be performed to ensure that trajectories of 5.56mm Frangible projectiles are similar to that of the M855's at a specified distance from the test weapon.

C.2 Equipment.

C.2.1 Weapon. The test weapons shall consist of two 14 inch barreled M4A1 carbines.

C.2.2 Mount. The weapon shall be supported during testing by mounting in suitable fixture as required to permit manual operation of the test weapon. The test fixture shall be constructed and mounted so as to prevent fixture movement during testing. It is very important that the weapon maintains its original position from shot to shot.

C.2.3 Targets. All test targets shall be rigidly mounted at a distance of 100 to 101 yards from the muzzle of the test weapon.

C.2.4 Range. The firing range shall be arranged such that a horizontal distance of 100 to 101 yards is maintained from the muzzle of the test weapon to the face of the test targets.

C.3 Test Procedure.

C.3.1 Cartridge examination. If visual defects are found in the test cartridges prior to testing, the defective cartridge(s) shall be replaced. Table IV shows the number of rounds to be fired at each temperature range.

C.3.2 Cartridge Conditioning. The required number of test cartridges shall be permitted to come to a temperature of $70^{\circ}\pm 2^{\circ}$ F prior to being placed in the controlled temperature room or container. The cartridges shall be placed in a controlled temperature room or container in such a manner that all the cartridges are subjected to an uniform temperature for a minimum of two hours, prior to firing. The room or container shall be maintained at $70^{\circ}\pm 2^{\circ}$ F and be of sufficient capacity to allow free circulation of air.

C.3.3 Weapon preparation. One 14 inch barreled M4A1 carbine shall be rigidly mounted on the test fixture. The test fixture shall be constructed and mounted so as to prevent fixture movement during testing. It is very important that the weapon maintains its original position from shot to shot. The chamber and the bore of the test weapon shall be thoroughly cleaned and wiped dry prior to firing.

C.3.4 Firing.

C.3.4.1 A minimum of three unrecorded cartridges of the type of ammunition under test shall be fired to assure that the test weapon is correctly sighted on the target, to warm and foul the weapon, and to settle the weapon in the test fixtures.

C.3.4.2 After the warming and fouling cartridges have been fired, the target shall be changed so as to present a fresh surface for the succeeding rounds.

C.3.4.3 All cartridges shall be singly loaded into the chamber of the test barrel. The required number of cartridges are removed from the controlled-temperature room or container and placed at a point convenient to the technician, provided temperature of the firing room is $70^{\circ}\pm 2^{\circ}$ F. Otherwise the cartridges shall be placed in an insulated box (five cartridges at a time) which has been conditioned at $70^{\circ}\pm 2^{\circ}$ F, and the box placed at a point convenient to the technician. The cartridges are then removed singly from the insulated box immediately before firing. If an insulated box is not available, then the cartridges shall be removed singly from the controlled-temperature room or container immediately before firing.

C.3.4.4 Thirty M855 cartridges shall be fired for record. All 30 cartridges must strike the target. The lay of the test barrel shall not be changed after the firing.

C.3.4.5 The target shall be changed but shall maintain the previous target's original position. Using the same barrel and barrel position, thirty 5.56mm Frangible test cartridges shall be fired. All 30 cartridges must strike the target.

C.3.4.6 When firing test cartridges, a sheet of 24" x 40" target paper shall be placed 5 feet from the muzzle of the test weapon to check occurrence of the projectile breakage.

C.3.4.7 The temperature of the test weapon barrel should be controlled so that the exposed metal surface of the barrel does not become too hot to grasp with the bare hands (approximately 140 F). If the barrel becomes too hot to use, it shall be cooled to ambient temperature before the test is continued. The chamber and bore shall be cleaned and wiped dry and the warming and fouling cartridges shall again be fired prior to continuation of the test.

C.3.4.8 The second weapon shall then be placed in the test fixtures and the cartridges shall be tested using the procedures of E.3.3.1 through E.3.3.6 above.

C.3.4.9 Each target shall be measured to determine the center point of impacts of the M855 and 5.56mm Frangible. The measurement shall be taken from the centers of the holes. Measurements shall be accurate within plus or minus 0.1 inch and results shall be recorded to the nearest one-tenth of an inch.

C.3.4.10 Misfired cartridges and fired cartridge cases and primers shall be retained for further examination.

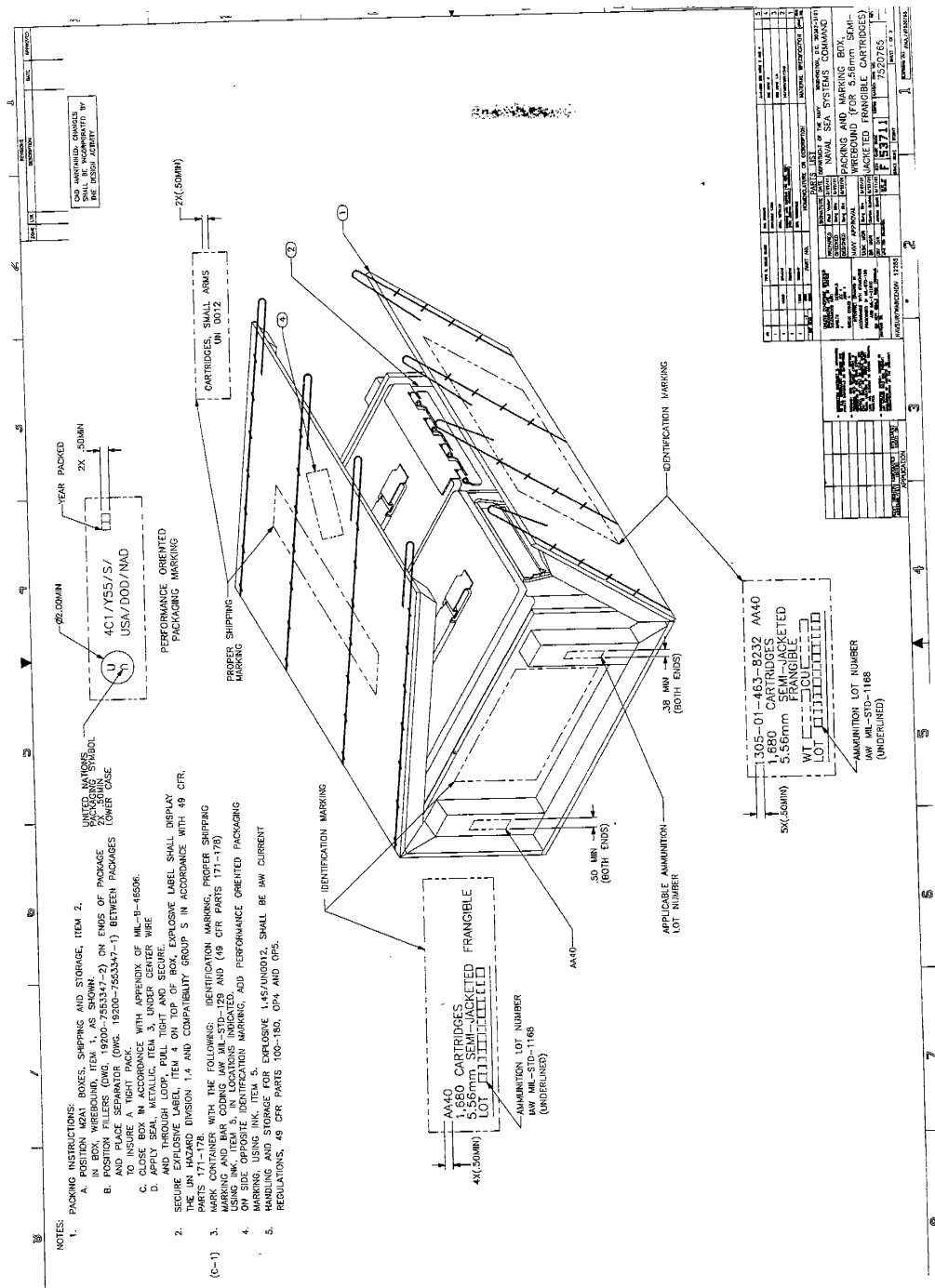
C.4 Examinations. All fired cartridge cases and primers shall be visually examined to determine compliance with the applicable requirements of Table I. In the event that fired case or primer defects are encountered, or if a misfire(s) occurs, then the test weapon shall be examined to determine if the defect(s) are attributable to the weapon. If the weapon is at fault, then the test shall be disregarded and the weapon shall be repaired or replaced prior to performing a retest. If the defect cannot be attributed to the weapon, then the defect shall be attributed to the cartridges. Misfired cartridges shall be disassembled to determine the cause of the misfire.

Packing And Marking of
Cartridge, 5.56mm [REDACTED] Frangible
DODIC/NALC: AA40

1. The 5.56mm Semi-Jacketed Frangible ammunition packing and marking shall be in accordance with the drawings listed in Table I.
2. During or immediately prior to the packaging operation, 100% examination of the cartridges shall be performed to ascertain that the lot does not contain a blank cartridge or a cartridge with the bullet missing. Examination shall be visual or by means of a Government approved inspection system. All non-conforming cartridges shall be removed from the lot. Inspection for packaging, packing and marking shall be in accordance with MIL-STD-644 as applicable to the drawing.
3. The 5.56mm Semi-Jacketed Frangible ammunition also can be 10 rounds per clip, 3 clips per carton, 28 cartons per M2A1 metal box, and 2 boxes (1680 cartridges) per wire-bound box. The marking on the carton shall be in accordance with the side marking on the wire-bound box of Drawing 7520765. Four magazine filler shall be included in each M2A1 metal box.

Table I: 5.56mm Semi-Jacketed Frangible Ammunition
Packing and Marking Drawings

<u>DRAWING NO.</u>	<u>DRAWING NAME</u>
7520765	Packing And Marking Box, Wirebound (For 5.56mm Semi-Jacketed Frangible Cartridges)
7520764	Packing And Marking for Box, M2A1 (For 5.56mm Semi-Jacketed Frangible Cartridges)
11010481	Body, Cartridge Clip
11010482	Spring, Cartridge Clip
11010483	Clip, Cartridge: 5.56MM, 10 Round
11010484	Filler, Magazine: 5.56MM, 10 Round
7553347	Box, Wirebound Boxes, Ammunition, M2A1
7553296	Box, Ammunition, M2A1 Assembly
11744234	Carton, Point Protector, 5.56MM, 30 Round
8594163	Seal, Car
8794342	Seal, Metallic, Assembly, Details And Instructions for Application
9325874	Packing for Light Boxes





NOTES:

1. FINISH 125/
2. ALL EDGES SHALL BE BROKEN OR ROUNDED .003 ± .005 UNLESS OTHERWISE SPECIFIED.
3. MATERIAL: STEEL FED SPEC QQ-S-690/1009, COLD ROLLED, NO. 4 TEMPER, DRAWING QUALITY.
4. DIMENSIONS APPLY AFTER FORMING.
5. USE 245 AS THE MAX MATERIAL CONDITION TO ITS SYMMETRY REQUIREMENT. SEE SECTION A-A.
6. FINISH 53.13 OR 53.23 OF MIL-STD-171 PLUS SUPPLEMENTARY FINISH MIL-W-36881. IS AUTHORIZED FOR CLEANING IN LIEU OF ABRASIVE BLASTING.
7. THE SUPPLEMENTARY FINISH (MIL-W-36881) SHALL BE COMPLETELY DRY FOR A MINIMUM OF 24 HOURS BEFORE ASSEMBLY WITH SPRING (C1010482) AND/OR PACKAGING.
8. MIL-W-13815 APPLIES.

SECTION A-A
SCALE 4/1

VIEW B-B

MECHANICAL PROPERTIES

TEMP.	YIELD STRENGTH	TENSILE STRENGTH	ELONGATION	REDUCTION OF AREA	CHARPY IMPACT
RT	50-60	60-70	10-15	40-50	10-15
150	50-60	60-70	10-15	40-50	10-15
200	50-60	60-70	10-15	40-50	10-15

REVISIONS

DATE	DESCRIPTION	APPROVED
10/1/66	1-12) SEE EQ HND 92263	10/1/66
10/1/66	1-11) SEE EQ HND 92263	10/1/66
10/1/66	1-10) SEE EQ HND 92263	10/1/66
10/1/66	1-9) SEE EQ HND 92263	10/1/66
10/1/66	1-8) SEE EQ HND 92263	10/1/66
10/1/66	1-7) SEE EQ HND 92263	10/1/66
10/1/66	1-6) SEE EQ HND 92263	10/1/66
10/1/66	1-5) SEE EQ HND 92263	10/1/66
10/1/66	1-4) SEE EQ HND 92263	10/1/66
10/1/66	1-3) SEE EQ HND 92263	10/1/66
10/1/66	1-2) SEE EQ HND 92263	10/1/66
10/1/66	1-1) SEE EQ HND 92263	10/1/66

REVISIONS

DATE	DESCRIPTION	APPROVED
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10/1/66	1-7) SEE EQ HND 92263	10/1/66
10/1/66	1-6) SEE EQ HND 92263	10/1/66
10/1/66	1-5) SEE EQ HND 92263	10/1/66
10/1/66	1-4) SEE EQ HND 92263	10/1/66
10/1/66	1-3) SEE EQ HND 92263	10/1/66
10/1/66	1-2) SEE EQ HND 92263	10/1/66
10/1/66	1-1) SEE EQ HND 92263	10/1/66

REVISIONS

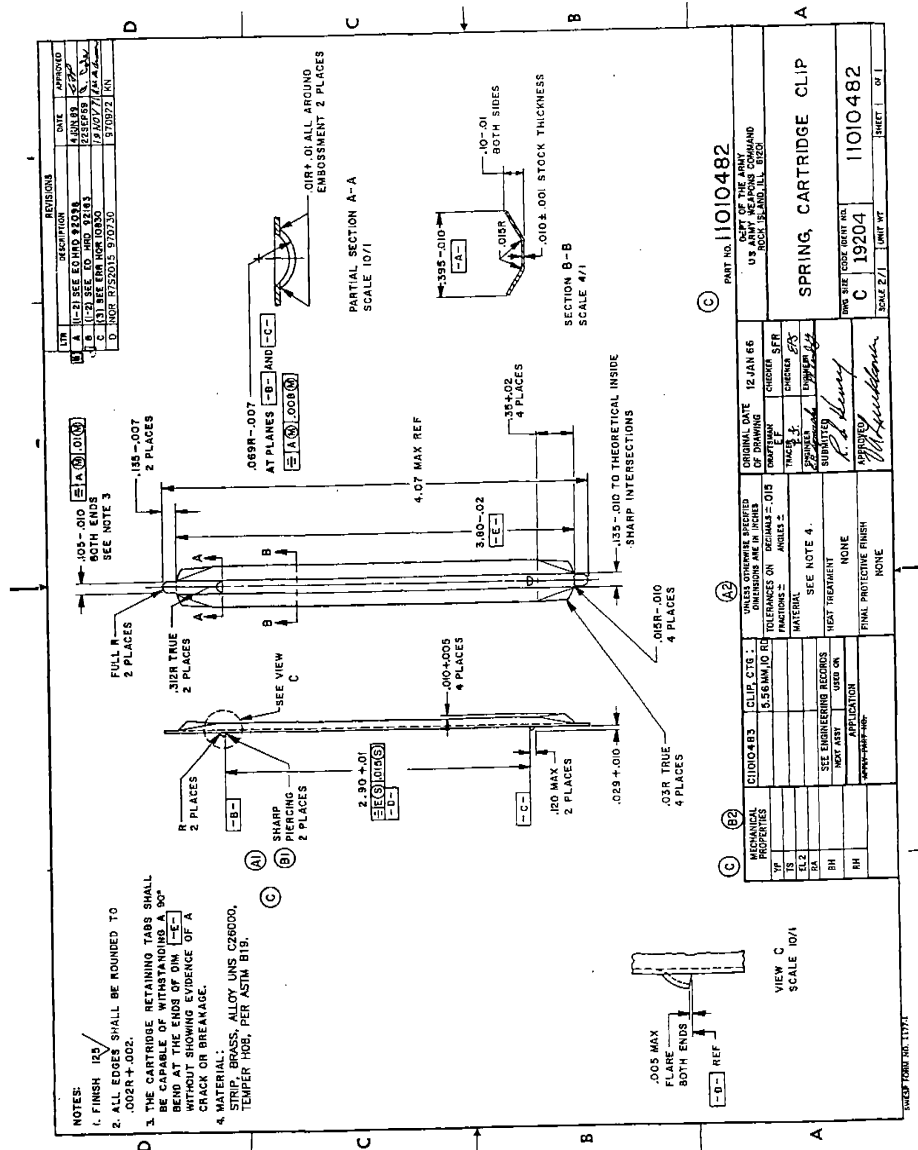
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10/1/66	1-7) SEE EQ HND 92263	10/1/66
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REVISIONS

DATE	DESCRIPTION	APPROVED
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10/1/66	1-8) SEE EQ HND 92263	10/1/66
10/1/66	1-7) SEE EQ HND 92263	10/1/66
10/1/66	1-6) SEE EQ HND 92263	10/1/66
10/1/66	1-5) SEE EQ HND 92263	10/1/66
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10/1/66	1-2) SEE EQ HND 92263	10/1/66
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REVISIONS

DATE	DESCRIPTION	APPROVED
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10/1/66	1-11) SEE EQ HND 92263	10/1/66
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10/1/66	1-7) SEE EQ HND 92263	10/1/66
10/1/66	1-6) SEE EQ HND 92263	10/1/66
10/1/66	1-5) SEE EQ HND 92263	10/1/66
10/1/66	1-4) SEE EQ HND 92263	10/1/66
10/1/66	1	



NOTES:

1. THE SPRING SHALL BE RETAINED IN THE BODY BY ENGAGEMENT OF ITS EMBOSSEMENTS IN THE SPRING RETAINING HOLES IN THE BODY. END PLAY OF SPRING IN BODY SHALL NOT EXCEED .04 IN EITHER DIRECTION.
2. NOTE FOR THE AMMUNITION LOADER: THE CARTRIDGE RETAINING TAB AT EACH END OF THE SPRING SHALL BE BENT CLOSE TO THE END CARTRIDGES IN THE STACK AFTER THE TEN CARTRIDGES HAVE BEEN LOADED. RE-BENDING OF THE TABS IS NOT PERMITTED. SEE SECTION A-A.
3. MIL-C-45531 APPLIES.
4. MIL-W-13895 APPLIES.

SECTION A-A

12 MIN (AFTER BENDING)
BOTH ENDS
SEE NOTE 2

SPRING 11010482

BODY 11010481

FOR LIST OF PARTS, SEE ENGINEERING PARTS LIST 11010483

SECTION A-A

MECHANICAL PROPERTIES

YP	T1	T2	RA	SH	RH

APPLY PART NO. 11010481 FOR APPLICATION.

SEE DWG C11010481 FOR APPLICATION.

SEE ENGINEERING RECORDS

APPLICATION

NEXT ASBY USED WITH

HEAT TREATMENT

MATERIAL

TOLERANCES ON DIMENSIONS ARE IN INCHES

FRACTIONS — DECIMALS — ANGLES —

UNLESS OTHERWISE SPECIFIED

ORIGINAL DATE 12 JAN 65

DRAWING E.F. CHECKER S.F.R.

TRACER E.F. CHECKER EPS

ENGINEER E.F. CHECKER EPS

SUBMITTED BY E.F. CHECKER EPS

APPROVED BY E.F. CHECKER EPS

FINAL PROTECTIVE FINISH

PART NO. 11010483

DEPT OF THE ARMY

U.S. ARMY WEAPONS COMMAND

ROCK ISLAND, ILL. 63501

CLIP, CARTRIDGE:

5.56MM, 10 ROUND

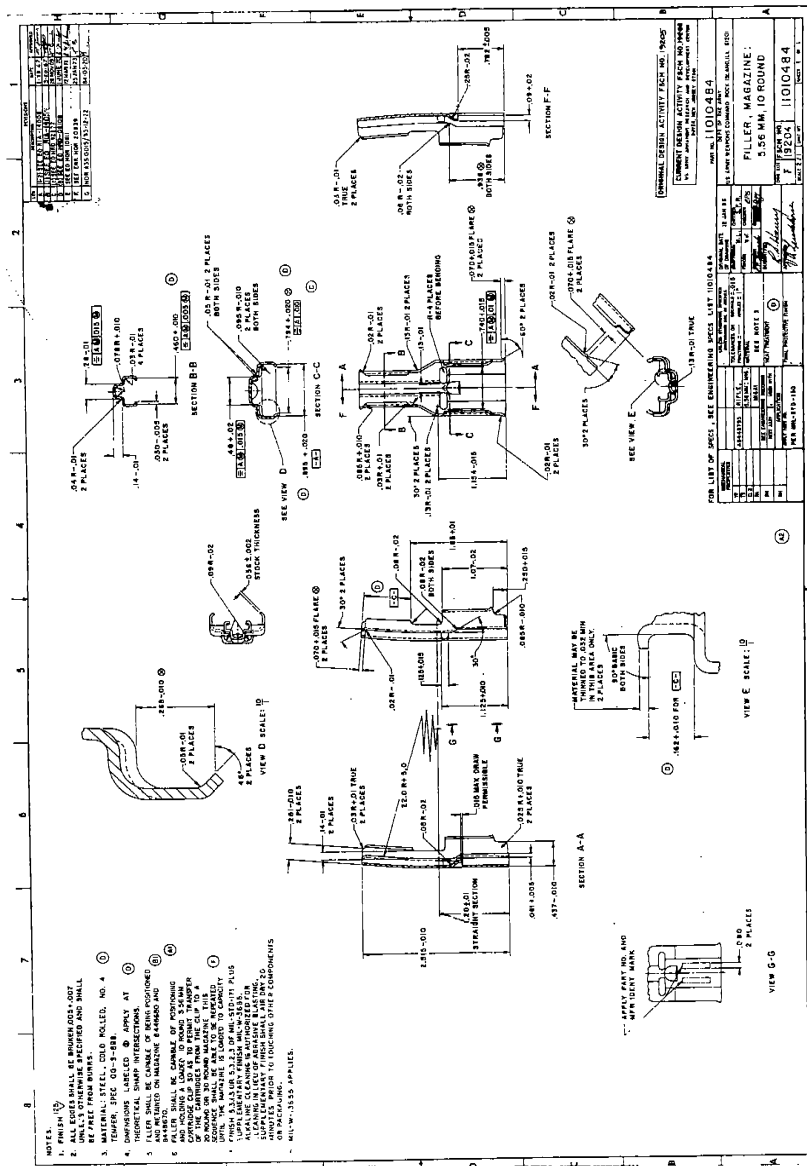
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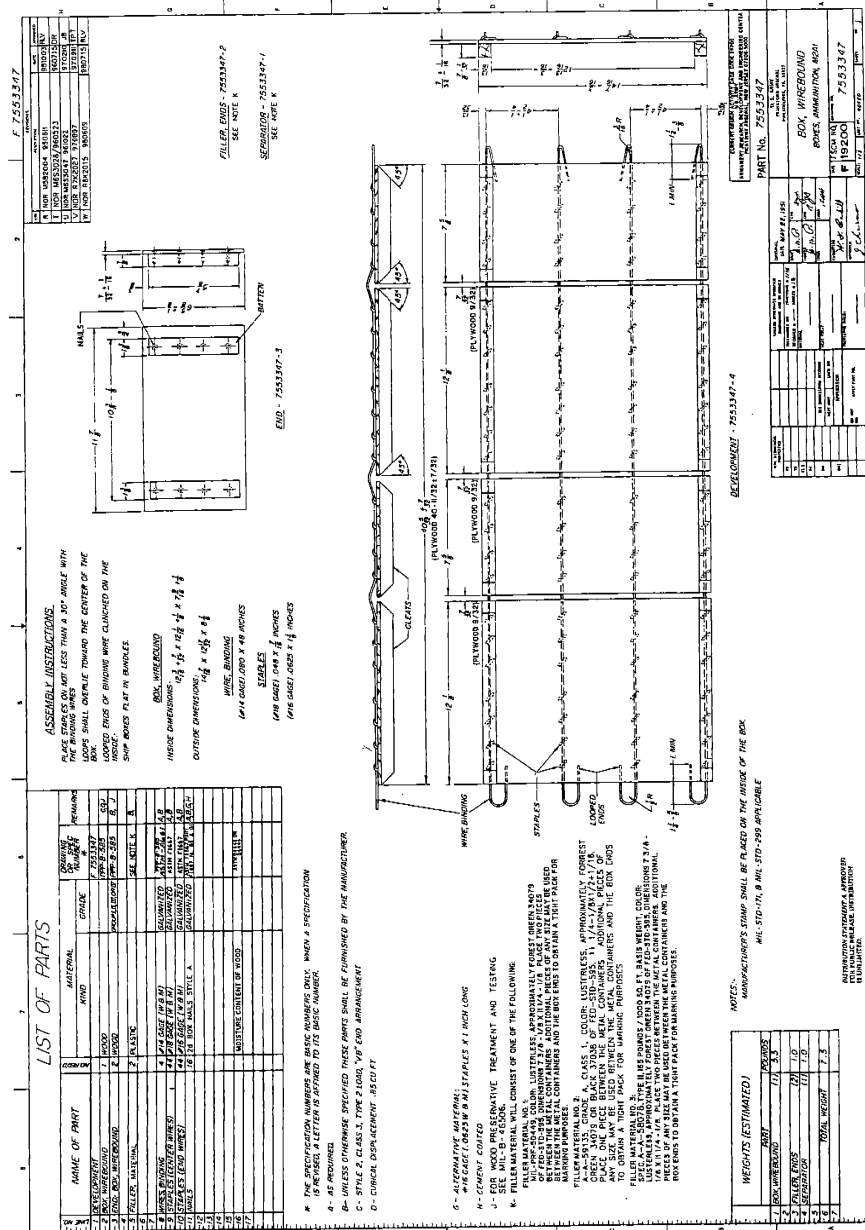
UNIT WT

SCALE 2/1

SHEET 1 OF 1

U E





INSIDE DIMENSIONS
 $11\frac{1}{2} \times 5\frac{1}{2} \times 4\frac{1}{2}$ X $6\frac{1}{2} \times 4\frac{1}{2}$

WHEN BOX IS ASSEMBLED WITH COVER CLOSED BODY PINNERS SHALL BUTT AGAINST COVER HINGE TO MAINTAIN A TIGHT JOINT CONCORDING WITH CENTERLINE OF COVER.

NOTE 4
 $5\frac{1}{2}$ MAX.

18 3/4 MAX.

COVER ASSEMBLY - 7551296

BOX ASSEMBLY - 7551296

7 1/2 MAX.

NOTES:

1. MATERIALS: MIL-A-3800 AND MIL-B-3080 APPLY.
2. GASKET REQUIREMENTS:
3. STANDARD COMPRESSION OF GASKET WHEN FLASHPIN IS ASSEMBLED MUST BE RETOUCHED TO MAINTAIN A 1.0MM THICKNESS OF PAINT DRAWING STATION. (SEE NOTE 5)
4. AN ADDITIONAL 1/8" TOL. VARIANCE PER SIDE MAY BE ADDED TO COVER WIDTH AT CORNERS TO ALLOW FOR EASIER HANDLING.
5. CONTEMPORARY PAINT IS USED TO TOUCH UP ANY DAMAGED PAINT AREAS USING COMPATIBLE PAINT IN THE PROPER THICKNESS AS APPROVED BY THE CONTRACTING OFFICER.

ITEM	DESCRIPTION	QUANTITY	UNIT	REMARKS
1	BOX ASSEMBLY WITH CHANGES	1	EA	7551296
2	COVER ASSEMBLY	1	EA	7551296
3	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
4	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
5	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
6	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
7	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
8	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
9	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
10	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
11	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
12	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
13	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
14	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
15	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
16	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
17	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
18	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
19	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
20	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
21	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
22	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
23	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
24	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
25	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
26	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
27	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
28	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
29	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
30	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
31	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
32	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
33	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
34	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
35	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
36	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
37	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
38	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
39	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
40	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
41	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
42	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
43	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
44	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
45	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
46	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
47	1/4" X 1/2" X 1/2" X 1/2" X 1/2" X 1/2"	1	EA	7551296
4				

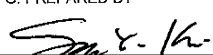

[illegible]


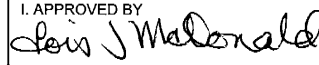
DISSEMINATION STATEMENT A
APPROVED FOR PUBLIC RELEASE, DISTRIBUTION IS UNLIMITED

FIG. 1. SEAL METALLIC LEAD. (SEE FIG. 1 FOR DETAILS OF SEAL METALLIC LEAD.)

FIG. 1. SEAL METALLIC LEAD. (SEE FIG. 1 FOR DETAILS OF SEAL METALLIC LEAD.)

[illegible]

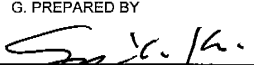

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)				Form Approved OMB No 0704-0188			
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.							
A. CONTRACT LINE ITEM NO.		B. EXH/ATCH NO.		C. CATEGORY:			
		A		TDP _____ TM _____ OTHER NDTI			
D. SYSTEM/ITEM Cartridge, 5.56mm, Semi-Jacketed Frangible		E. CONTRACT/PR. NO.		F. CONTRACTOR			
1. DATA ITEM NO. A001		2. TITLE OF DATA ITEM Test/Inspection Report		3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-NDTI-80809B		5. CONTRACT REFERENCE See Block 16.		6. REQUIRING OFFICE Code 4083			
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED C	10. FREQUENCY See Block 16.	12. DATE OF FIRST SUBMISSION See Block 16.	14. DISTRIBUTION			
8. APP CODE D		11. AS OF DATE NONE	13. DATE OF SUBSEQUENT SUBMISSION See Block 16.	a. ADDRESSEE	b. COPIES		
16. REMARKS 16.1 The contractor shall mark each submission with the contract number and CDRL number. 16.2 <u>Block 5.</u> Contract References for this CDRL are: HS/4083/C01/1240 section 4 and appendices A through C inclusive. 16.3 <u>Block 7.</u> The Code 4083 Technical Representative will have authority to accept or reject each Test/Inspection Report submitted by the contractor. 16.4 <u>Blocks 7 and 8.</u> Contractor shall use a letter of transmittal to submit each Test/Inspection Report (T/IR) and DD 250 to Code 4083. Code 4083 will have fifteen (15) working days after receipt of each T/IR to review and accept or reject each T/IR received. T/IR acceptance/rejection will be based on content compliance with DID DI-NDTI-80809B and Block 5 references. DD 250 submitted by letter of transmittal with T/IR will be used for acceptance or rejection. An information copy of each DD 250 shall be forwarded to Code 1162 for each T/IR received. 16.5 <u>Blocks 8, and 9.</u> DISTRIBUTION STATEMENT C: "Distribution authorized to U.S. Government agencies and their contractors. Other requests shall be referred to: COMMANDER, CODE 4083 BLDG., 2521 SUNG KIM, NAVSURFWARCENDIV, 300 HIGHWAY 361, CRANE IN 47522-5001." 16.6 <u>Blocks 10, 12, and 13.</u> The contractor shall submit a Test/Inspection Report for each test and inspection conducted in support of this contract. Each Test/Inspection Report shall cover the results of the tests and inspections conducted and any other efforts performed in support of this contract. The contractor shall submit Test/Inspection Reports for each shipment of cartridges or for each lot of cartridges, whichever is smaller. The contractor shall forward the Test/Inspection Reports to the Code 4083 Tech Rep at the time of shipment of cartridges procured under this contract. 16.7 <u>Block 14.a.</u> The address is: COMMANDER CODE 4083 BLDG. 2521 SUNG KIM NAVSURFWARCENDIV 300 HIGHWAY 361 CRANE IN 47522-5001 16.8 <u>T/IR Media.</u> Each T/IR shall be submitted on durable quality paper. If contractor elects to submit data in media other than durable quality paper, the contractor shall contact Code 4083 to confirm compatibility of alternate media and to obtain written agreement from Code 4083 to use the alternate media. Without written agreement from Code 4083, each T/IR shall be submitted on durable quality paper.				Draft	Final		
					Reg	Repr	
				See Block 16	0	6	0
				15. TOTAL	0	6	0
G. PREPARED BY 	H. DATE 5/15/01	I. APPROVED BY 		J. DATE 5/15/01			

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)					Form Approved OMB No 0704-0188		
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.							
A. CONTRACT LINE ITEM NO.		B. EXH/ATCH NO. A		C. CATEGORY: TDP _____ TM _____ OTHER <u>MISC</u>			
D. SYSTEM/ITEM Cartridge, 5.56mm, Semi-Jacketed Frangible		E. CONTRACT/PR. NO.		F. CONTRACTOR			
1. DATA ITEM NO. A002	2. TITLE OF DATA ITEM Ammunition Data Card			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80043A		5. CONTRACT REFERENCE See Block 16.		6. REQUIRING OFFICE Code 4083			
7. DD 250 REQ LT	9. DIST STATEMENT REQUIRED C	10. FREQUENCY OTIME	12. DATE OF FIRST SUBMISSION See Block 16.	14. DISTRIBUTION			
8. APP CODE D		11. AS OF DATE NONE	13. DATE OF SUBSEQUENT SUBMISSION NONE	a. ADDRESSEE			
16. REMARKS 16.1 The contractor shall mark each submission with the contract number and CDRL number. 16.2 <u>Block 5</u> . Contract reference for this CDRL is: paragraph 4.1.3 of HS/4083/C01/1240. 16.3 <u>Block 7</u> . The Code 4083 Technical Representative (Tech Rep) will have the authority to accept or reject each Ammunition Data Card submitted by the contractor, based on compliance with this CDRL and the associated DID. 16.4 <u>Blocks 8 and 9</u> . DISTRIBUTION STATEMENT C: "Distribution authorized to U.S. Government agencies and their contractors. Other requests shall be referred to: COMMANDER, CODE 4083 BLDG. 2521 SUNG KIM, NAVSURFWARCENDIV, 300 HIGHWAY 361, CRANE IN 47522-5001." 16.5 <u>Block 12</u> . The contractor shall attach one (1) Ammunition Data Card to the shipping documentation for each shipment. The contractor shall also forward six (6) Ammunition Data Cards to Code 4083 as stated in 16.6.1 below. 16.6 <u>Block 14</u> . 16.6.1 <u>Quantity - Copies, Final, Reg</u> The contractor shall prepare Ammunition Data Cards in sufficient quantity to assure one (1) each Ammunition Data Card per shipment shipped under this contract. The contractor shall prepare an additional six (6) each Ammunition Data Cards and shall forward the six (6) each Ammunition Data Cards to Code 4083 (address shown in 16.6.3 below). If Ammunition Data Cards for different shipments/lots differ in content, the contractor shall prepare and forward to Code 4083 six (6) each of each unique Ammunition Data Card for the cartridges procured under this contract. Copies of Ammunition Data Cards for Code 4083 shall be forwarded at time of shipment of cartridges. 16.6.2. In lieu of 6 each Ammunition Data Cards, contractor may submit one floppy diskette that contains Ammunition Data Card information in accordance with MIL-STD-1168B section 5.10 and one paper copy of data card. 16.6.3. <u>Address</u> COMMANDER CODE 4083 BLDG. 2521 SUNG KIM NAVSURFWARCENDIV 300 HIGHWAY 361 CRANE IN 47522-5001				b. COPIES			
				Draft		Final	
				Reg		Repr	
				* See Block 16.	0	*	0
				15. TOTAL		0	*
G. PREPARED BY 		H. DATE 5/15/01		I. APPROVED BY 			
				J. DATE 5/15/01			

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CONTRACT DATA REQUIREMENTS LIST (1 Data Item)						Form Approved OMB No 0704-0188			
Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.									
A. CONTRACT LINE ITEM NO.		B. EXHATCH NO. A		C. CATEGORY: TDP _____ TM _____ OTHER QCIC					
D. SYSTEM/ITEM Cartridge, 5.56mm, Semi-Jacketed Frangible			E. CONTRACT/PR. NO.		F. CONTRACTOR				
1. DATA ITEM NO. A003		2. TITLE OF DATA ITEM Inspection and Test Plan			3. SUBTITLE				
4. AUTHORITY (Data Acquisition Document No.) DI-QCIC-81110			5. CONTRACT REFERENCE See Block 16.		6. REQUIRING OFFICE Code 4083				
7. DD 250 REQ LT		9. DIST STATEMENT REQUIRED C		10. FREQUENCY ONE/R		12. DATE OF FIRST SUBMISSION 30 DAC			
8. APP CODE D		11. AS OF DATE NONE		13. DATE OF SUBSEQUENT SUBMISSION ASREQ		14. DISTRIBUTION			
16. REMARKS 16.1 The contractor shall mark each submission with the contract number and CDRL number. 16.2 Block 5. Contract references for this CDRL are: HS/4083/C01/1240 section 4 and appendices A through C inclusive. 16.3 Blocks 8. and 9. DISTRIBUTION STATEMENT C. 16.4 Blocks 8., 10. and 12. The contractor shall submit one (1) copy of the contractor's draft ITP to the Code 4083 Technical Representative (Tech Rep) not later than thirty (30) calendar days after contract award. The Code 4083 Tech Rep will review the draft ITP for conformance to this CDRL, to the associated DID, to the Quality Assurance requirements of contract, and to the tests and inspections in HS/4083/C01/1240 section 4 and appendices A through C inclusive. The Code 4083 Tech Rep will return the draft ITP, with recommended changes/comments, to the contractor within fifteen (15) calendar days after receipt of the draft ITP. The contractor shall provide the Code 4083 Tech Rep with six (6) copies of the final ITP, which incorporates the Code 4083 Tech Rep's recommended changes/comments, no later than fifteen (15) calendar days after receipt of the Code 4083 Tech Rep's changes/comments. The Code 4083 Tech Rep will accept/reject the final ITP within fifteen (15) calendar days after receipt of the final ITP. 16.5 Block 13. Revisions to ITP: If a revision to the accepted ITP is required during the life of the contract by the contractor, the contractor shall submit each proposed ITP revision to the Code 4083 Tech Rep for review and acceptance/rejection prior to instituting the revised ITP. The contractor shall submit each proposed revision to the ITP to the Code 4083 Tech Rep, who will review and accept or reject the proposed ITP revision within fifteen (15) calendar days. The contractor shall not use any revised ITP until it has been reviewed and accepted by the Code 4083 Tech Rep. 16.6 Block 14.a. The address is: COMMANDER CODE 4083 BLDG. 2521 SUNG KIM NAVSURFWARCENDIV 300 HIGHWAY 361 CRANE IN 47522-5001 16.7 Note: Per paragraph 10.1 of DI-QCIC-81110, the contractor shall submit draft and final ITPs in contractor format. To expedite receipt by the Code 4083 Tech Rep, the contractor may submit the draft ITP by facsimile transmission (FAX) to telephone number 812-854-1044. If a draft ITP is submitted by FAX, the contractor shall alert the Code 4083 Tech Rep by calling 812-854-5807 prior to FAXing the draft ITP. The contractor shall not FAX the final ITP copies. The contractor may FAX proposed revisions, by first alerting the Code 4083 Tech Rep and then FAXing the proposed ITP revision.						a. ADDRESSEE		b. COPIES	
								Draft Final	
								Reg Repr	
						See Block 16		1 6 0	
						15. TOTAL		1 6 0	
G. PREPARED BY 		H. DATE 5/15/01		I. APPROVED BY 		J. DATE 5/15/01			

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